A Lecture
ON THE
STUDY OF CLINICAL MEDICINE.

Delivered in the Royal Infirmary of Edinburgh at the commencement of the Winter Session, 1861–62,

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GENTLEMEN,—I have to-day to begin, on the part of my colleagues and myself, a course of Clinical Medicine. Now, the object of clinical medicine is this: to enable you to study disease, and the medical management of disease, for yourselves. This is the special business of clinical medicine, as contrasted with those systematic courses which you have elsewhere, and in which the leading doctrines of medical science have to be instilled into your minds chiefly through the opinions and words of your teachers. Here, in the wards of the hospital, teacher and student are sent to school together. It is our business here to study disease, not with a view to a body of doctrine, but with a view to the management of individual cases. We study these cases with the professed intention, first, of treating them medically; secondly, of learning from them as much as we can. And the duty of the student, on the one hand, and of the teacher on the other, may be deduced from the careful consideration of this double point of view.

As I have very little time for preliminary remarks, and must compress them into about half a lecture, I wish to submit to you only a very few important considerations bearing upon this matter. I said, we have to study disease, and also the medical management of disease. Do not forget that both of these objects are essential. If our object here were simply to study disease, or individual cases of disease, considered altogether apart from the management of them, we might proceed in a different way. I might in that case take you into the wards, and make them a scene of disputation and controversy, by discussing with you at the bedside, in presence of the patient, the whole of the medical doctrines bearing upon his case, as laid down in books and in the schools. And as I said we are sent here to *school*, I might make the wards a *schoolroom*, and nothing more; I might run the risk of forgetting what is due to the patient, in making his case matter of instruction for you. I recognise here a serious danger, amply illustrated in some of the foreign systems of clinical instruction. I need not tell you, therefore, that this is not the way we are about to proceed; because, as I remarked at the beginning, we have a double object. We have to study disease, and we have to study also the medical management of disease. Now, remember that the medical management of disease is, to you, nothing less than the business of your lives. If I fail to teach you that, I teach you nothing. If I take you into the wards and teach you physical diagnosis, for example, and forget to teach you the medical management of disease, I teach you nothing that will be of permanent service to you. If I even forget to teach you those little courtesies of the sick-room which are often all in all to the physician, I have forgotten not the least part of my duty. I must teach you, not only to know diseases, but to treat them; and among the little details of treatment and management which are of no small importance—I had almost said, which are of the greatest importance—are the manners and habits, the way of thinking and speaking and acting, proper to the sick-room. I must teach you—not by words or in lectures, it is true—how to approach your patient, how to communicate with him, and how to leave him. The rules of the hospital, and the obvious necessities of clinical teaching, permit us to approach the patients together; they permit us to surround the beds in numbers; they give us free access to the sick room, where, as a general rule in private practice, few are present. That is a necessity of the case, and it is, on the whole, a useful necessity. I do not think that, with proper precautions, it is one likely to be abused in our wards. But this very necessity of the case appeals only the more strongly to our good feeling, and requires of us not to let slip from our minds the central idea from which we are to proceed; which is, that the teaching of clinical medicine is not alone the imparting to you certain doctrines about disease in connexion with the individual patient, but also the communication, by precept and by example, of everything bearing on the treatment of the sick; by which I do not mean, of course, the medicines and prescriptions only, but a great deal of what is both more difficult and more important.

The first thing we have to learn, then,—and let everything be throughout kept subordinate to that,—is the management of the sick-room. We have to look upon the hospital ward simply as a large sick-room; we have to do everything in it, as far as possible, just as we should in the private sick-room. You will observe at once that this view of our duty imposes certain limits on our instructions at the bed-side; but if you have rightly understood me, you will perceive that it does so as much in your true interest as in that of the patient. I wish this to become an element in your instruction; I wish it to become an all-pervading feeling in our clinical course. One thing is certain, you never can become physicians, in any high sense of the word, till you are pervaded by this feeling, and therefore the sooner you begin so to feel and so to act the better alike for you as students and for us as teachers; the better, too, for your patients and for ours, whether now or in the far future.

Now, then, here is another thing that I wish to say to you at the outset of this clinical course. My colleagues and I are, according to the regulations of this hospital, wholly and exclusively responsible for the treatment of our patients in the several wards. I wish you to understand that this is a responsibility of which I, for one, cannot possibly divest myself. I should simply give way to a fallacy if I allowed you to suppose, even for a moment, that your opinion, formed from books or from your other teachers, or, indeed, anyone's opinion, except in so far as it may influence my individual judgment, is to have anything to do with the treatment of the patients in my wards. It is I that must treat these patients, and no one else; unless, indeed, the resident physician in my absence. It is I that must decide in my own mind all about the care of the sick, and so maintain inviolate my own responsibility. How am I to do this—for that is a feeling I cannot lay aside—how am I to do this, and at the same time make the treatment of the sick a matter of instruction to you? Some of the modern systems of clinical teaching attempt to accomplish the double object of teaching the student and treating the sick by more or less completely shifting the responsibilities of the physician to the shoulders of the student. The student is held responsible for part of the investigations on which treatment is based—he notes the facts, he in some degree forms the opinions; the physician stands by, and is a kind of "guide, philosopher, and friend" of the student; but in the main he is content to devolve upon his assistants, as it were, a good deal both of the labour of observation and the responsibility of treatment, which must, of course, be based upon observation. The student is called up to the bed-side; he states his opinion, and defends it; he proposes a treatment; it is accepted or not; a discussion takes place, and the treatment ultimately employed emerges, as it were, from the joint reflections of the student and of his teacher, acting upon one another at the bed-side. Now, I have tried this plan fairly, and I tell you frankly that it does not do. It is, in my opinion, a showy and specious, but not a genuine or truly practical method of clinical teaching, for it leads, in the first place, to an almost unlimited waste of the time properly due to the sick and their concerns; and in the second place, it leads to a sort of conversation and to certain habits of thought and action unfitted for the sick-room at all times, and especially in cases requiring delicate and careful moral management. I might add, that my experience of the histories of disease recorded according to this method is not favourable. I have found such records to be too often unfaithful as to the facts—pictures of disease drawn according to the fancy of the recorder, and vitiated by the confusion of the patient, or by suggestions arising at these bed-side discussions, and converted into apparent facts by being insisted on in presence of the sick. You cannot expect to get a clear narrative of facts out of a controversial discussion of opinions; it is not according to human nature that you should do so. But the main objection I have to this way of teaching is, that it is inconsistent with the primary relation of physician and patient, and therefore with the habits of the sick-room, which it is my duty to teach you, whatever else I teach you. The discussion of opinions at the bed-side, to the extent required by this method, assuredly tends to a feeling of uncertainty on the part

of the physician as well as of the patient, unfavourable to the proper management and cure of disease. I am content, therefore, to sacrifice whatever of apparent advantage there is in this method of teaching. And I tell you frankly that I will always, as far as is possible, observe for myself the essential facts of every case; and that I will, from my own observations for the most part, determine what is to be done, without respect to what you think or have to say in the matter. In many cases I will not engage even to tell you the process of my reasoning, though as far as possible I *will* endeavour to do this, either at the bed-side or in the lecture-room. This must be my method, for the reasons I have already told you. But I hope to make it instructive to you in this way. You come here to learn, by contact with an educated mind in connexion with the sick, how disease is actually viewed as a matter of treatment; and the way in which I can best enable you to do this is simply by what I will express in two words—by *thinking aloud*. My object throughout will be to think aloud—to have no mental reservations—to make everything come before you just as it comes before my own mind—to tell you, or to convey to you without formally telling you, what I think of every individual fact—every individual symptom, at the moment it emerges; and therefore, as a part of this plan, to eliminate, as far as possible, both the histories and the theory of the cases before your own minds, by writing down the facts, for the most part, in your presence, causing you to observe them, and to know and feel, as it were, their true significance as we proceed. You will find that this idea pervades our whole system of case-taking. You will see in it, if I mistake not, my anxiety for your instruction—my anxiety that the whole conduct of the investigation should be, as much as possible, under your eyes—my wish to make the very statement of the facts, as far as may be, a *thinking aloud* in your presence. Now you will say,—"Is not this, too, a violation of the primary idea of conduct in the sick-room? Are there not things very proper to be spoken between student and teacher, which must not be spoken in the presence of the patient?" No doubt there are. There are certain things, for example, in medicine which you can easily understand, but which a patient cannot understand. There are certain things which may be stated in language such as will enable you to appreciate their true value, but which will convey exaggerated or erroneous impressions to the patient. These difficulties we must carefully keep in view in all that we say at the bedside. You must endeavour to understand and follow me when I am trying to soften a painful impression to the patient, or to prevent him from taking an unduly exaggerated view of a fact in his case. You must endeavour to enter into the spirit of my teaching—into the feelings with which I am speaking, as well as into the mere words that I speak. But when that is done all the rest is plain sailing, so to speak. I want to have no concealments, no mental reservations, no shirking or speaking round about the plain facts of a case. I wish also, for your sake as well as my own, to have no double language; one for the bed-side, and one for the class-room; one full of exaggerated sympathy, the other in the ordinary, hard, indifferent tone of scientific investigation. I wish, in speaking to you and to the patients, to preserve the same character throughout; and whether in the class-room or at the bed-side, I must beg of you all to aid me in this. Let us all endeavour to fulfil the idea beautifully expressed by Sydney Smith in one of his brilliant conversational sayings—so full at once of wit and of wisdom, of the finest humour and the most genuine practical philosophy. "Here," he said, "we live with open windows." Let us study, in general, so to speak, that everyone about us may know exactly what we are and what we think—our patients amongst the rest. And, trust me, that is the best way in general to deal with the sick. Have no mental reservations with them that you can possibly avoid. I trust that we shall all do our best to make that the pervading spirit of the clinical teaching in this hospital; and, if we rightly understand the spirit, the details of teaching will emanate naturally, without any fixed method of proceeding, from the consideration of each case as it comes under our notice in the wards.

A word or two only as to some things which it is especially desirable to avoid. There is a bustling, pretentious manner which springs from the wish to produce an impression—and which often does produce a false impression—of superior knowledge. Avoid this by all means, for it is very offensive at the bed-side. We have none of us occasion, you will find, to plume ourselves on what we know; far oftener we have to lament our deficiencies; to feel humbled that we know so little, especially so little of what is practically useful. Remember always that here we are all alike students. I, though officially your teacher, am at the bed-side a student like yourselves, only invested with a responsibility that you have not. Another thing we must try to avoid—namely, the unnecessary use of technical terms. I do not mean that we can avoid them altogether; but we must try not to use them in an absurd and pedantic way, because the practical effect of that is that the patient is apt to take what is unknown for something very terrible; and if you use technical terms too much, he will be apt to suppose that you have something to conceal from him, and that he is labouring under some very unusual and tremendous form of disease. To sum up this argument in a few words: let us all try to keep up in the wards as much as possible of the appearance and manner and language and conduct that we should like to see at the bed-sides of our own private patients, or at our own bed-sides for that matter. Let us try to exhibit the same candour, the same simplicity of purpose, the same spirit of sympathy and cordiality with the sick here that we would maintain in private life.

Nevertheless I must not forget that you are to be instructed about some points which are strictly technical, and which require a great deal of minute and careful consideration as to the best mode of communicating them. For this purpose, amongst others, we meet once a week, at least, here in the lecture-room; and I may occasionally bring you here at other times when I have something particular to say. But in general, a great deal of this may also, with due preparation and selection of cases, be done without offence or injury at the bed-side. From experience, too, I find that the best way of proceeding is usually suggested, to a great extent, by the consideration of the particular circumstances of the case. You will find that at the bed-side I shall now and then call you up individually, and make you observe things for yourselves. If there is anything new and curious to be noted, I will always endeavour to give as large a number of you as possible an opportunity of observing it. And with regard to physical diagnosis, and especially auscultation, which is often a difficult matter to manage in accordance with the feelings of the patient, I will try as much as possible, even in recording the facts, to make you observe them along with me in every instance. Where this cannot be done with the whole of you who may be present, I will usually take up one or two of you and make you observers for the rest; and you will find that I very rarely indeed write down anything as a fact which is not observed by some of you, as well as by myself, to be a fact. I do not say I shall be able to let you all hear and see everything, because that is impossible; but I will let some of you, and as many of you as possible, hear all that is to be heard and see all that is to be seen.

I need not tell you that with regard to such subjects as the examination of the urine and some of the more ordinary elements of physical diagnosis, in which the illustrations are constantly at hand, we shall be able to give you tolerably complete instruction. We shall give ourselves carefully to this early in the session, and a special series of instructions will be given on these points both by my colleagues and myself. I trust that in the study of physical diagnosis you will find considerable advantage in recording your observations by means of those outline figures or clinical diagrams which I have employed more or less for a good while past, but which have now been issued by Messrs. Maclachlan and Stewart in a form available for all of you, and by no means expensive.* I strongly advise you to obtain these diagrams, and to employ them habitually in the wards. They are to be had in the form of loose sheets; also in the form of books, most of which are interleaved, to allow you to make notes of the case upon the intermediate leaves. The use I intend to make of these outlines is to note down, by a set of conventional marks which I will explain to you in the wards, as much as possible of the physical diagnosis; and I intend that you shall keep a similar series of notes, and employ them as an aid to the memory in future observations.

Now I believe that I have said all that it is necessary to say in the way of general introduction to the course, with this exception, that I wish you fully to understand the advantages that you will derive from the system introduced into this hospital some years ago by the common consent of the ordinary physicians, and in regard to which I think I may fairly claim for myself a considerable share in its introduction—namely, the system of making one ticket give admission to the clinical instructions of all the ordinary physicians together.† By means of this arrangement we have been enabled to throw open to you a

* Outline Figures for recording Physical Diagnosis, for the use of Students and Practitioners of Medicine. Edinburgh: Maclachlan and Stewart.

† The system sanctioned by the managers for many years before the period referred to was for the first and second ordinary physicians to give a course of clinical instruction in alternate years, the remaining physicians not being allowed to lecture.

very large field of very various information, both general and special, under the management of different physicians, each of whom, of course, will have in some points his own way of thinking and acting. You will soon, I doubt not, find out for yourselves in what order it will be best for you to attend the different wards, and what time you ought to give to each clinical visit. You will have the general medical lectures of Dr. Begbie and myself about twice a week during the whole session, and we shall also have the co-operation, though to a more limited extent, of Dr. Sanders. Dr. Matthews Duncan will be charged with the department of the diseases of women, and the wards for fevers and for cases of disordered mind will be under the care of one or other of us during the entire session. I advise you, however, to follow, for the most part, one clinical visit at a time—not necessarily for the whole session, but at least for a time, in order that you may not let slip the matters which are carried on from day to day, and which it is important for you to observe in connexion. And through the single ticket the whole of the wards of the ordinary physicians will be accessible to you, both the wards that are devoted to general cases and those that are devoted to special cases.

With these preliminary observations, I proceed to give you some information about the cases at present in the wards.

OBSERVATIONS ON CERTAIN TUMOURS OF THE NECK,

WITH NOTES RELATING TO ITS SURGICAL ANATOMY.

BY ANDREW MELVILLE M'WHINNIE, ESQ., F.R.C.S.

(*Continued from p. 65.*)

IN the foregoing pages the object has been to contribute to the pathological records of thyroidal tumours, and at the same time to give a brief summary of the several modes of treatment adapted to the various forms of the complaint as brought under our notice in this country. Allusion has been made, also, to the operations specially performed for the relief of dyspnœa occasioned by these particular swellings. I shall now offer some remarks on the subject of bronchotomy generally.

It has been noticed that in dyspnœa occasioned by tumours of the thyroid the trachea might be concealed to such an extent as to be entirely out of the reach of the operator for its relief, not only below, but also above the isthmus; and that, under these circumstances, there is no alternative but the performance of laryngotomy, as illustrated by Figs. 2 and 3, where the enlarged transverse portion of the thyroid body also covers the cricoid cartilage. In some other examples of bronchocele, the swelling would admit of the trachea itself being opened at its highest point, as shown in Fig. 1. In cases of impending suffocation from other causes, this may be the only available part for an operation for the relief of the patient; that is, through the uppermost rings of the trachea, immediately below the cricoid cartilage.

The following instance is selected from some clinical records of operations on the air-passages:—

A man about fifty years of age, long known to have some throat affection, but said to have been ordinarily in the enjoyment of good health, was admitted July 16th, 1843, into St. Bartholomew's Hospital. He had suffered recently from paroxysms of difficult breathing and threatening suffocation, arising from an obscure swelling at the upper part and side of the neck, supposed to be caused by a deep-seated abscess. It was impossible to open the mouth so as to obtain a view of the fauces, the head being bent forward and the chin pressed down in front. Mr. Wormald was called to him suddenly in the night, but not in time to save the patient. On his arrival, he immediately made an aperture into the trachea above the thyroid gland; he was compelled to confine himself to operating upon the upper part of the windpipe, there being, in consequence of the bent position of the head forward, so exceedingly short a distance between the larynx and the sternum.

At the post-mortem examination it was found that the fatal termination was occasioned by a pendulous tumour of the fauces obstructing the glottis; it is exhibited in a drawing by Delamotte in the collection.

The limited space in which the trachea here could alone be reached did not exceed an inch between the cricoid cartilage and the sternum. We observed in the dissection that the very large veins which ramified in front of the trachea below the isthmus might in this subject have alone rendered tracheotomy low down very difficult if not almost impossible of execution. It appeared, therefore, that the incision through the upper rings—to which, from the shortness of the neck, it was necessarily confined—was anatomically the best situation in this instance that could have been selected. Here, then, as in the case of bronchocele figured in a former communication, the upper part only of the air-passage could be reached.

In operations upon the air-tube, the sphere of action of the surgeon may, in a variety of ways, be limited; as again, for instance, where it is necessary to operate on a neck which has become permanently bent forward by the contraction of a cicatrix. An example of this kind I am acquainted with, where, dyspnœa coming on ten months after attempted suicide, tracheotomy was undertaken, but was unsuccessful, partly on account of the depth of the tube in a very contracted space. The preparation in the museum of the Sussex County Hospital exhibits the epiglottis partially divided, with imperfect union, and a permanent fistulous opening leading down to this part from the old contracted wound in the integument of the throat.

The first operation on account of dyspnœa that I had occasion to perform was in St. Bartholomew's Hospital upon an elderly man of spare habit. Threatened suffocation was here produced by a swelling in the fauces of long standing. I was assisted in its execution by Mr. B. Barrow, of Ryde. The trachea, easily exposed and laid bare, was, with the view of operating at a distance from the seat of the disease existing in the larynx, opened below the isthmus of the thyroid. The relief to the patient, worn out by repeated attacks of dyspnœa, was not of long duration. There was found a tumour occupying the upper aperture of the larynx, encroaching upon the rima glottidis and neighbouring parts. There is a drawing of this tumour in the museum. In this case, in which the impediment was wholly confined to the vicinity of the glottis, a free entrance of air was afforded by the operation below it. He appeared to sink, as many half-asphyxiated persons do after bronchotomy, from the causes recently explained by Dr. Fuller—namely, partly from the shock sustained by the nervous system from the long and oft-repeated struggles for breath, and the imperfect subsequent expansion of the lungs consequent on collapse of the pulmonary tissue. It may be remarked that the same amount of relief would, in all probability, have been afforded, as in the first case, by operating higher up, although nearer to the local disease. But here the circumstances were altogether favourable for an operation upon any part of the cartilages of the windpipe. Any point might have been reached with equal facility, and almost as readily as upon the dead body, the neck being thin, and the whole tube therefore placed near the surface. No vessels of any magnitude impeded the steps of the operation, during which the patient was comparatively tranquil. There is nothing farther that I find especially noted down at the time, in reference to this tracheotomy case, except that the tube was steadied and brought forward by an ordinary dissecting-hook before the rings were perforated, and slit upwards with a fine narrow-bladed scalpel, which I have always preferred as safe and easy to manipulate, and well suited, if expedient, for cutting out and removing portions of the cartilages—a proceeding perhaps not sufficiently insisted upon where an artificial tube is not at hand, or cannot be retained, or the patient, after the operation, has not the advantage of a proper attendant. The immediate benefit derivable from this measure may be safely put into the scale against the possible risk of any contraction of the trachea arising subsequently on the healing of the wound.

If, in the last case and similar ones, an impression should have been made in favour of opening the trachea low down towards the sternum, such impression would be considerably modified by the contemplation of instances like the following:—A child of about four years of age, who had attempted to drink boiling water from the spout of a tea-kettle, was brought into St. Bartholomew's Hospital. Mr. W. S. Ward, the house-surgeon—now of Wellow Hall, Notts,—finding that there was threatening suffocation, at once proceeded to the operation of opening the trachea; so great, however, was the gush of blood that this gentleman was obliged to desist for at least half an hour before he could open the tube. The little patient did not long survive. In the post-mortem examination it was found that the large quantity of blood had flowed from the thyroid

veins above the sternum. In this instance the boiling fluid appeared to have reached the stomach, which, as well as the œsophagus, presented patches of sloughy mucous membrane; the parts about the upper part of the larynx were in the same state, and much swollen.

Another case of the same description was reported by me about the same time in one of the journals: so violent was the hæmorrhage that the surgeon was obliged to relinquish altogether the further steps of the operation. On dissection, we discovered that the isthmus of the thyroid did not reach so high as to conceal either of the two upper rings of the trachea, which were thus separated from the integument only by fat; but inferiorly the thyroid body was in contact with the cornua of the thymus gland, so that the space in front of the trachea uncovered by these structures was exceedingly small. The bleeding seemed to have arisen from large superficial veins ascending over the isthmus and anastomosing with the anterior jugular veins.

These cases forcibly exemplify the extreme difficulty which sometimes occurs in performing tracheotomy in young children low down in the neck. In the notes appended to both these cases, it is mentioned that the mischief done to the upper part of the larynx was confined to the neighbourhood of the glottis, and that the windpipe might have been much more readily and safely opened higher up towards the larynx; and that an efficient opening might also have been effected as high up as through the crico-thyroid membrane. Such and similar occurrences were calculated to make as unfavourable an impression as upon Desault, who at the first incision met with so fearful a flow of blood that he was obliged to desist from the operation, and in the meantime the patient perished. Appalled by the circumstance, this celebrated surgeon was led to designate tracheotomy as "une opération toujours fâcheuse."

It is fortunate, however, that it is frequently unattended with difficulty, and the young practitioner, the house-surgeon or dresser, suddenly called in emergency, or left in responsible charge, has to record it not only as his first operation, but his first serious one attended with success; and those who have been attached for many years to the service of a large hospital have seen tracheotomy executed as promptly and efficiently by the beginner as by the more proficient in operative surgery. On the other hand, they have seen experienced surgeons perplexed or altogether foiled; for, meeting with unforeseen difficulties, these have been as much troubled and dismayed as in any emergency in their profession. On no occasion at the operating table have we witnessed or been made acquainted with severer scenes of distress, as well to the patient as to the operator and bystanders,—the patient perhaps sent back to his bed unrelieved, or dying suffocated before us.

A gentleman of much experience, whose name has been already mentioned, was summoned to the assistance of a little boy who had attempted to drink boiling water from a kettle. In the operation for tracheotomy, a considerable amount of venous hæmorrhage took place during the first incisions; this occurrence, together with the violent struggles for breath of the poor child, produced a scene which caused great terror to the friends and people around. On a free opening being made into the trachea, the bleeding subsided, and the child became relieved and slept for an hour; convulsions, however, owing to the serious nature of the original injury, came on, and death unhappily ensued. This event was at once attributed to the "doctor." All this happening in an inferior locality of the metropolis, a commotion to such an extent arose throughout the neighbourhood, that my most humane and skilful friend welcomed the arrival of the police, placing himself most willingly under their protection.

In another case, one of disease of the larynx in an adult female, the same gentleman was called in by a physician, and at his request made a free opening into the trachea immediately below the cricoid cartilage, with a successful result, but not without great trouble from an unexpected source. Two pupils accompanied him as assistants, and although they had been much accustomed to attend operations, this particular one affected them so remarkably that they both fainted away, and the surgeon was left to continue his duty, in an operation at all times particularly requiring aid, single-handed.

Such are a few of the instances which recur to my memory of the troubles and accidents attending operations upon the windpipe. Upon these a chapter might be written, for what surgeon of any standing is unacquainted with them and could not add to the list? Circumstances which cannot be controlled must constantly present themselves here as in other regions of the body; it is surely, therefore, of the utmost moment that the surgeon should select that part of the respiratory tube which experience and his anatomical knowledge point out to him as being most free from risk and difficulty. But there are occasions, as we have seen, where the opportunity of selection is not afforded to him. With these considerations of undoubted importance in view, a few notes relating to the surgical anatomy of the upper part of the trachea will be next introduced.

(To be continued.)

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

ST. MARY'S HOSPITAL.

EXCISION OF BOTH SUPERIOR MAXILLARY BONES, BOTH PALATAL BONES, BOTH INFERIOR TURBINATED BONES, VOMER, AND PART OF THE ETHMOID BONES, INVOLVED IN A TUMOUR; RECOVERY.

(Under the care of Mr. LANE.)

In 1829 the first operation for excision of the upper jaw was performed by Gensoul at the Hôtel Dieu of Lyons, although it had been proposed by Lizars three years before. It has been practised of late years by most surgeons of eminence, with success in about four-fifths of the cases; it may be said, therefore, to be a very satisfactory proceeding. Though a serious operation, it is described by Erichsen and others as not a very dangerous one.

The following case, the notes of which were kindly placed at our disposal by Mr. Lane, is one of considerable interest and importance; for the superior maxillary and other bones were involved in a tumour, which was found to be an albuminous sarcoma, and so extensive and wide-spreading that no other resource was left than entire removal as far as practicable. This was accomplished satisfactorily, a good recovery resulting with but little deformity. The bleeding, although free, did not require a single ligature to arrest it. In some respects the case bears a striking analogy to one published by Mr. Butcher in the *Dublin Quarterly Medical Journal* for August, 1853, wherein the entire upper jaw was successfully removed in a boy aged sixteen, on account of a large fibro-vascular tumour springing from the antrum. The age of Mr. Lane's patient is greater, but the recovery, on the whole, promises to be permanent. A good series of cases of operations on the jaws will be found in the first volume of THE LANCET for 1861, pp. 6 and 206.

W. H——, aged forty-eight, was admitted Oct. 12th, 1860, with a large tumour implicating the two superior maxillary bones, filling both nostrils, and encroaching considerably on the cavity of the mouth. The features were much distorted by the growth, the nose being projected forwards, and the superior maxillary bones made to bulge both forwards and laterally, so as to produce a very hideous deformity. On examining the growth from the buccal cavity, it was found to form an extensive convex irregular swelling, pressing down the tongue and completely concealing the soft palate. All the teeth, excepting three on the right side, had disappeared. The position of the orbital plates was but slightly interfered with. Very little bony material could be distinguished by the finger in the position of the palatine processes of the superior maxillary or palatal bones. The growth which occupied their place was soft and elastic, and was ulcerated in two or three spots of the size of a fourpenny-piece. A small portion of the tumour taken from one of these spots was submitted to microscopical examination by Dr. Handfield Jones, and designated by him as a specimen of albuminous sarcoma. Deglutition and respiration were seriously interfered with; the senses of taste and smell were also

greatly impaired, but the sight remained perfect; indeed, the floors of the orbits were but slightly if at all displaced. The growth first showed itself within the left nostril three or four years previously, and presented the appearance of an ordinary nasal polypus. It gave him no pain, but as it inconvenienced him by blocking up the nostril he attended as an out-patient, and was under the care of Mr. Spencer Smith, by whom the growth was removed three times, at intervals of several months, and always with considerable relief. The removal was not attended by any unusual symptoms, either at the time or afterwards, which could lead to the suspicion that it would subsequently involve the bones of the face. He had ceased to attend as an out-patient, and had not been seen for nine months previous to his admission.

On the 21st of November, 1860, Mr. Lane removed both superior maxillary bones, both palate bones, both inferior turbinated bones, the vomer, and a considerable portion of the ethmoid bone, which were all involved in the tumour. The patient was placed in the sitting position, and chloroform having been administered, two corresponding incisions were made on either side of the face, commencing a few lines internal to the angles of the mouth, and continuing upwards and slightly inwards by the side of the nose to the inner margins of the orbits. These incisions allowed of the reflection of a central and two lateral flaps. The lateral flaps, composed of a small portion of the upper lip and of the cheek, served to expose the portions of the tumour corresponding to the tuberosities of the superior maxillary bones, while the central flap, composed of the bulk of the upper lip and the soft parts of the entire nose, fully laid bare the cavities and osseous boundaries of the nostrils. A strong pair of bone forceps were used to detach the superior maxillary from the malar bone at the infra-orbital fissure on each side. The ascending nasal processes of the former bones were next divided. Pressure being then made on the entire mass in the downward direction, the substance of the tumour gave way, leaving about one-third of its bulk connected with the palate bones and part of the tuberosities of the superior maxillary bones. In order to remove the remainder of the tumour, the forceps were again used on either side, between what remained of the tuberosities of the superior maxillary bones and the pterygoid processes of the sphenoid and palate bones. The rest of the tumour was now displaced, but was still held by the soft palate. This was divided by a scalpel, and the whole removed. On examining carefully the immense cavity from which the diseased structures had been ablated, the mucous membrane covering the vomer, where it is attached to the body of the sphenoid, was found thickened and diseased. This bone, with its diseased covering, was consequently taken away. This state of membrane, however, was continued on to the basilar process of the occipital bone, and could not be entirely removed. The hæmorrhage, though profuse, was much less than might have been expected, and no ligatures were required. The flaps were supported by compresses of lint introduced into the mouth and nostrils, and their edges were brought together by interrupted sutures.

After the operation, nutritious diet in a fluid form, with wine and brandy, were freely given. The sutures were removed from the fifth to the tenth day; and notwithstanding a slight attack of erysipelas, the wound healed by the first intention, and he progressed favourably, the mucous membrane spreading gradually over the denuded surfaces within the mouth and nostrils; although his recovery was unfortunately delayed by a second attack of erysipelas. On examining the interior of the mouth four months after the operation, two strong fibrous bands could be felt: one anteriorly, in the position of the alveolar process; the other posteriorly, forming the front border of the soft palate. Laterally, the large space which had been occupied by the tumour and the removed bones was covered by mucous membrane; but superiorly, behind the soft palate, and springing from the under surface of the basilar process, that part of the growth which could not be removed at the time of the operation might be distinctly seen. It presented the appearance of a fungous growth about the size of a walnut, and bled readily when roughly touched. To this the perchloride of iron and burnt alum were daily applied. The Eustachian tubes could be easily seen; their orifices appeared thickened, and hearing was dull. He left the hospital April 5th, 1861.

Since this period he has presented himself for inspection from time to time. On his last visit (Nov. 16th) he appeared strong and in good health. The fungous growth (which, he says, gives him no uneasiness) still remains; it has not increased in size, although he has ceased to apply any escharotic to it for some months. He has quite recovered his hearing. The nose and superior maxillary region are flattened, but the deformity is trifling compared with what might have been expected. His principal cause of annoyance since his recovery from the operation has been his inability to speak as plainly as before.

EXCISION OF THE LEFT SUPERIOR MAXILLARY BONE, FOR A SOFT FIBRO-NUCLEATED TUMOUR OCCUPYING THE ANTRUM AND NOSTRIL; RECOVERY.

(Under the care of Mr. LANE.)

Mary P——, aged nine, was admitted October 5th, 1861, with a tumour occupying the left side of the face, bulging out the cheek, and distorting the countenance. She had been sent to the hospital from Chepstow by Mr. A. G. Lawrence, late one of the house-surgeons. On examining the growth from the interior of the mouth, it was found to extend externally as far as the malar bone; internally it passed the median line, and encroached slightly upon the opposite maxillary bone; anteriorly it reached the alveolar process, and posteriorly it pressed backwards the palate bones with the soft palate. It presented a considerable convexity downwards towards the mouth, and into this an incision had been made from behind forwards three weeks prior to her admission, from which blood only had escaped. All but two of the teeth on the diseased side had fallen out. In the upward direction the growth did not distend the orbit, but could be seen like a polypus occupying the lower half of the nostril. The circumference of the tumour had an osseous boundary, but the rest of the swelling was soft and yielding on pressure.

The mother had noticed a small soft projection on the palate whilst the child was teething; but it did not apparently increase, and no further notice was taken of it till three months before her admission, when the left side of the face was observed to become prominent, and the swelling on the palate began also to enlarge. The child had not suffered any pain or inconvenience from the morbid growth.

On the 16th October, Mr. Lane removed the superior maxillary bone, together with the tumour. The patient was placed under the influence of chloroform, and supported in a sitting posture throughout the operation. An incision was made in the median line through the upper lip, and continued by the side of the ala of the nose to near the inner canthus of the eye, and a flap of skin was dissected upwards and outwards so as to expose the tumour, care being taken not to divide the nerve and vessels escaping at the infra-orbital foramen, as the floor of the orbit did not require removal. A small *inner* flap was then formed by detaching the ala of the nose and the contiguous portion of the lip of the right side, so as to fully expose the interior of the left nostril. One blade of the cutting forceps was then placed within the nostril above the tumour, and the other blade adjusted in the fossa under the malar bone. The blades were approximated, and the intervening bone divided immediately below the orbit and infra-orbital foramen. The hard palate was next cut through with the forceps as far back as its junction with the palate bone, and as close to the median line as possible. The tumour was now forcibly depressed, when the osseous attachments not divided readily gave way, and the diseased growth and surrounding bone were removed. The bleeding was free, but not excessive, and soon ceased spontaneously. No dressing was applied within the mouth. The edges of the wound were brought together by interrupted sutures, and one hare-lip pin was used to adjust the thick central portion of the lip.

The patient was fully under the influence of chloroform throughout, and no embarrassment of the breathing was experienced from the blood passing back into the throat, the head being carefully held forwards. The sutures were removed on the third day, and the hare-lip pin on the fifth. The wound healed by the first intention, except a small portion at the upper part; but on the tenth day the whole was perfectly closed. The child was fed for the first week by a spoon with beef-tea, arrowroot, wine-and-water, &c., in small quantities frequently repeated. At the end of a fortnight she could eat soft solids and drink freely from a small teapot.

At the present time, four weeks from the operation, on examining the interior of the mouth, the mucous membrane is seen not yet to have covered the whole of the granulating surfaces. The margins of the shell of bone left at the median line, at the palate bone posteriorly, and at the posterior part of the tuberosity of the superior maxillary bone, are everted and a little thickened, but the mucous membrane is gradually creeping over them.

Portions of the growth, placed under the microscope, presented the characters of a fibro-nucleated structure, being

composed of minute fibres, in which were disseminated numerous small oval nuclei about the size of blood-globules, measuring from the four-thousandth to the three-thousandth part of an inch in diameter.

ST. BARTHOLOMEW'S HOSPITAL.

NECROSIS OF THE LOWER JAW FROM THE FUMES OF PHOSPHORUS; REMOVAL OF THE DISEASE ON SEVERAL OCCASIONS.

(Under the care of Mr. PAGET.)

THE swelling of the face, in cases of necrosis of the jaw arising from the fumes of phosphorus, is so peculiar and characteristic that it is possible to diagnose almost any case of the kind from it alone. The tissues become so infiltrated that they cause a great amount of facial intumescence, which sometimes becomes truly enormous; and, as far as we have observed, it remains more or less prominent for years after the whole of the diseased bone has been extracted, and the exciting cause of the disease removed. This was especially noticed in a patient upon whom Mr. Thomas Wakley operated in 1857. (*Vide* THE LANCET, vol. ii. 1857, p. 31.) Although every particle of dead bone was taken away, the puffy and bloated face is yet observed, not so great, however, as it was at one time. The subject of that operation is to be seen occasionally about the streets, exhibiting himself for a livelihood, and everting his mouth to show that his lower jaw is absent.

The following cases had the characteristic puffy swelling. In the first the disease was confined to the lower, and in the second to the upper, jaw. It would appear that both jaws are equally liable to become affected, although it is unusual to see it in both at once. Of 51 cases observed by Von Bibra, both were affected in 5 instances, the upper alone in 21 cases, the lower in 25. Examples of this form of necrosis are rarely witnessed in women in this country, but are common in other parts of Europe; and it has been remarked by M. Moignet, an ecclesiastic well known to science, that abortion is frequent amongst the pregnant women who are employed in factories of lucifer matches.

J. H——, aged nineteen, a porter in a lucifer-match manufactory for four years, but not engaged in the manufacture of the matches beyond piling them after they were dipped. Eighteen months ago he had two of the teeth in his lower jaw extracted; shortly after the lower jaw began to swell, and two months later he was admitted as a patient, under the care of Mr. Stanley. Abscesses now formed around the bone; these subsequently became converted into numerous fistulæ and sinuses, which on several occasions gave exit to pieces of dead bone. His general health became much impaired, notwithstanding the use of tonics and liberal diet. The removal of the necrosed bone was contemplated by Mr. Stanley; but as it was discovered that the lad had extensive aortic valvular disease, and the inhalation of chloroform was therefore an unsafe proceeding, nothing was attempted.

Subsequently the patient came under Mr. Paget's care, who, considering that there was no likelihood of getting rid of the necrosed bone without an operation, determined, with the concurrence of his colleagues, to perform one, especially as the patient's general health had become somewhat improved.

On October 19th, 1861, chloroform was carefully administered, and, when anæsthesia was complete, an incision was made by Mr. Paget through the centre of the lower lip and chin, and the flaps turned aside. A shell of new bone was now found surrounding the necrosed part, exclusive of the alveolar ridge. The jaw was sawn through at the symphyses, the two portions separated, and the dead bone was withdrawn on either side as far as the angle of the jaw by means of forceps. The rami were also diseased, but their removal Mr. Paget deferred to another opportunity. The wound was now closed, and the patient carried to his ward, without having suffered in the least from the effects of the chloroform.

Nov. 23rd.—Chloroform was again cautiously given to the patient, when Mr. Paget enlarged an opening communicating with the dead bone, and with a pair of forceps withdrew the left ascending ramus, coronoid process, and condyle. This was effected with great facility; but as the right ramus was still pretty firm, and not loose enough, its removal was deferred. It appears that he has progressed very favourably since the last operation, but the cheeks are extremely puffed out laterally. On his first admission the necrosis was confined to the left side, but it subsequently extended to the right.

Jan. 16th, 1862.—The patient has progressed favourably in his general health. No further operative measures have been resorted to since November, and there is at the present time no indication of the dead portion of bone on the right side of the lower jaw having separated.

NECROSIS OF THE UPPER JAW FROM THE FUMES OF PHOSPHORUS; REMOVAL OF THE WHOLE OF THE BONE; RECOVERY.

(Under the care of Mr. WORMALD.)

Frederick S——, aged twenty-eight, was an out-patient under Mr. Coote in the month of May, 1861. He had been a lucifer-match maker for eighteen years, and had remained free from disease up to three years ago. The right cheek was very much swollen and puffy-looking, and beneath the eyelid was a sinus leading to diseased bone. The entire upper jaw on the right side was involved in necrosis; the bone on the opposite side was affected to a less extent, and no very marked swelling was yet apparent there. The nostrils were so encroached upon as seriously to interfere with breathing through them. His general health was very bad, owing to the irritation and horribly fetid discharge arising from his disease.

At a later period he was admitted as an in-door patient, under Mr. Wormald's care. The right side of the jaw was now more affected, although the swelling of the face was chiefly confined to the left side. On the 9th July chloroform was administered to the patient, when he was submitted (by Mr. Wormald) to the operation for extirpation of the whole of the upper jaw-bone, that part alone excepted which forms the roof of the orbit. The line of incision extended along the side of the nostril and through the lip, which readily permitted the diseased bone to be seen and excised. The subsequent progress of this case was satisfactory, and altogether the deformity was much less than is usually observed when the lower jaw is removed, more particularly as regards the swelling of the face.

GUY'S HOSPITAL.

EXTRACTION OF THE CORONOID PROCESS AND A PORTION OF THE HORIZONTAL RAMUS OF THE LOWER JAW FOR NECROSIS.

(Under the care of Mr. THOS. BRYANT.)

CHARLOTTE G——, aged four years, was brought to Mr. Bryant in the summer of 1861, with a large abscess on the right side of the face, discharging internally. She had suffered from measles four months previously, and during her convalescence had been attacked with her present affection. A month before she was brought to the hospital, a small piece of bone came away, together with a molar tooth.

On examination, a large abscess evidently existed, and within the mouth several sinuses were present, which communicated with exposed and necrosed bone. The child's health was tolerably good.

By means of a pair of dressing forceps Mr. Bryant readily removed the coronoid process of the lower jaw, with the upper portion of the alveolar process of the horizontal ramus, extending forwards for about an inch. Convalescence, however, rapidly followed, although the movement of the jaw was in a measure limited; but when last seen (a few weeks ago) this had improved.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

TUESDAY, JAN. 14TH, 1862.

DR. BALFOUR, VICE-PRESIDENT, IN THE CHAIR.

ON SOME AFFECTIONS OF THE CÆCAL PORTION OF THE INTESTINES, WITH ILLUSTRATIVE CASES.

BY FREDERICK GEORGE REED, M.D.

THE principal object of this paper being to bring under the notice of the Fellows of the Society the four subjoined cases, which present some remarkable features of a practical nature, it was deemed to be superfluous and misplaced to enter upon

the diagnostic signs of the several abnormal conditions with which lodgments or accumulation, together with their results, in the cæcal portion of the intestinal canal, might possibly be confounded; but it might be stated, in speaking of diseases of the intestinal tube, that two conditions are recognised—the one resulting from an excessive accumulation of intestinal contents at some particular part of its course, as the primary cause; the other, as commencing in the structure of the intestine itself, apparently independent of any accumulation or lodgment; and to these a third may be added, resulting from formations that take place exterior to the intestinal tunics, but occasionally influencing the diameter of its canal and its functions. The most reliable signs of lodgment or accumulation in the cæcal portion of the intestine are of a local character; and it is essential to bear in mind, that pain, without the coexistence of other symptoms, is not to be depended upon, as in obstruction in the left iliac region pain is frequently referred to the right side or umbilicus. A local tumour can generally be detected, with defined margins, painful on pressure, from which the pain seems to radiate, and which may depend on simple distension only, or upon inflammation in the tunics of the canal, varying in degree from the most simple to the most severe stages of inflammation and its results. The habit of the patient, and the previous history of each case, are important in forming the diagnosis. If accumulation merely exists, the obvious remedy is to unload the distended bowel; and this is best accomplished by the use of the warm hip-bath, and by small and frequently-repeated doses of the watery extract of aloes, in the form of pills, with soap, combined or not with calomel, or, in some asthenic cases, with extract of nux vomica, if not contra-indicated. In cases where this object is effectually accomplished, the impending inflammatory stage is not developed; but should this not be the case, the inflammatory complications and consequences are, in the opinion of the author, best treated as briefly detailed in the subjoined cases:—

CASE 1.—A. B——, aged eighteen, the son of a gentleman residing in Surrey, being in perfect health, and having no hereditary tendency to disease. In the evening of the 12th August, 1858, he ate a large quantity of unripe plums. During the night, having pain in his bowels, he took some strong purgative medicines, which acted very violently, dislodging a great many plum-stones. Mr. Nowell Stowers, of Kennington, saw him the following morning. He was suffering from constant tenesmus, and severe pain in the bowels of a colicky nature, especially in the right iliac region. On the evening of the following day I saw the case, and subsequently attended in consultation with Mr. Stowers. There was a distinctly defined swelling, about the size of a small orange, in the region of the cæcum, dull on percussion, and painful on pressure; febrile symptoms, with diffused peritonitis, came on, but no sickness. For some days subsequently the swelling increased considerably in size, and the general symptoms became much aggravated. Tympanitis, hiccup, and prostration ensued, and liquid muco-feculent evacuations, tinged with blood, passed frequently. The treatment consisted of calomel-and-opium, given in small and frequently-repeated doses. Opiate suppositories were used, also turpentine stupes, succeeded by warm fomentations and poultices; perfect rest in the prone position; fluid animal and farinaceous diet, all solids being prohibited. On the fifth day the patient showed evidence of being slightly under mercurial influence, and from this date the symptoms gradually diminished in intensity; but a solid swelling, about four inches in circumference, remained in the right iliac region, painful on pressure. Blisters, iodine, and mercury, were applied locally, and various measures to support the strength. At the end of three weeks he was allowed to sit up in a chair. After an action of the bowels, it was discovered he had passed a portion of intestine, about ten or twelve inches in length, without pain, or being himself aware of any unusual occurrence. He was again strictly confined to the recumbent position, with fluid farinaceous diet only for a considerable period. Eventually he entirely recovered, and is at the present time in perfect health, three years having elapsed. The preparation exhibited consists of the portion of intestine voided, being about ten inches of large intestine, together with the cæcum and vermiform appendix; of the former, only about one-third of the calibre of the canal; whilst the entire tube of the appendix is present. It has been given to the Royal College of Surgeons for the museum, where no preparation of a similar kind exists.

CASE 2.—A. J——, aged fourteen, a healthy girl, in April, 1846, was suddenly seized with pain in the right iliac region, her bowels having been previously very constipated. She took some strong aperient medicine, which produced no effect. I saw her the day following. Being a very nervous, hysterical girl, the early diagnosis was rather masked, but the abdomen appeared distended and painful. After a warm hip-bath and a copious turpentine enema the bowels acted twice freely. Subsequently, frequent doses of calomel-and-opium, leeches, followed by a turpentine stupe, perfect rest in the recumbent position, and restriction to fluid nourishment, were prescribed. On the following day the abdomen was less distended, and a defined tumour, painful on pressure, about three inches in extent, and dull on percussion, was readily felt in the region of the cæcum. The inflammatory symptoms became gradually more severe, and on the fourth day she appeared to be approaching a state of collapse. The calomel-and-opium was discontinued, and stimulants were substituted. She rallied under this treatment. On the eleventh day, a portion of intestine, six or seven inches in length, was voided per anum—apparently colon. Severe dysenteric symptoms followed, controlled by sulphate of copper and opium, no solid food being allowed. After an anxious period of some weeks, she gradually recovered, and has continued well to the present time.

CASE 3.—A. B——, aged twenty, a strong, healthy young man, on rising from bed, quite well, early in the morning, ate hastily several unripe apples. About four hours afterwards he was seized suddenly with intense pain in the right iliac region, and forthwith took some aperient medicine, which acted freely. I was requested to see him a few hours afterwards. He was lying on his back, with his right thigh bent, and complained of extreme pain in the region of the cæcum, increased on firm pressure. No local tumour could be detected. He had vomited the meat breakfast he had eaten, and had an anxious look. He indicated the exact spot where, he said, "he was sure some part of an apple had stuck"—in the region of the cæcum. The pain rapidly increased, acute inflammation set in, with tympanitis, and he died in great suffering on the fourth day. Bleeding, leeches, calomel-and-opium, the latter in large doses, turpentine stupe, warm poultices, perfect quiet, with fluid nourishment only, constituted his treatment generally. On examination, general abdominal inflammation was found to have existed, but most intense and advanced about the cæcum, which appeared to have been loosely connected congenitally, and was, together with the vermiform appendix and about four inches of intestine (ileum), invaginated in the ascending colon. In the interior of the cæcum, a portion of the core of an apple, about one-third of an inch, was firmly embedded in the free margin of the ileo-cæcal valve, and was with some difficulty removed from its bed.

CASE 4.—A lady, aged twenty-three, very healthy, on the 17th of November, 1849, was seized suddenly with violent pain in the right iliac region, and was attended by a medical gentleman, who prescribed leeches and other remedies. I was requested to see her the same day, and learnt that the bowels had been habitually very constipated during the previous month. There was no hernia, but a distinctly defined tumour, dull on percussion, in the region of the cæcum. On examination by the vagina, the tumour could with difficulty be reached; but the right ovary was readily detected, distinct, and much larger than ordinary. Calomel-and-opium, in small and very frequently-repeated doses, was ordered. Turpentine stupes, succeeded by warm poultices, to the abdomen, and also a large turpentine injection, which dislodged a quantity of hardened fæces, were prescribed, with perfect rest, and fluid nourishment only. The symptoms of inflammation became more severe and diffused; the local swelling increased considerably, attended with most acute pain in the hip, so much so that the patient attributed all her disease to the hip-joint; œdema of the whole thigh, leg, and foot to a great extent followed; and all the symptoms became so aggravated that she appeared *moribund*. The gums showed evidence of mercurial action, and she was able to take fluid nourishment and stimulants *ad libitum*. Sir Charles Locock and Dr. Ferguson saw the case about this date in consultation with me. Shortly afterwards an abscess evidently was forming, and pointing just above the middle of Poupart's ligament. Her state appearing almost hopeless, no satisfactory relief having taken place from the upper bowels for nearly three weeks, a large enema of gruel with turpentine and ox-gall, was administered, and in half an hour nearly two chamber-vesselsful of most offensive fæcal accumulation passed per anum, followed by great prostration; but she rallied under the use of large quantities of stimulants. The pain in the hip and œdema gradually subsided from this period. After five weeks from the commencement of her illness the abscess burst externally; a large quantity of offensive pus, mixed with fæcal matter, was discharged, and continued daily. A fistulous opening with the cæcum apparently became established, more feculent matter passing by this outlet than per anum. Her

condition varied for a long period. At length she was well, excepting the fæcal fistula, which was most loathsome. After eight months from the commencement of her illness, Sir Benjamin Brodie saw the case in consultation with me, and advised her having a couch made so as to be recumbent on her face night and day for several months; one-drachm doses of powdered cubebs were administered twice a day, and the edges of the wound touched with nitrate of silver. Her general health improved. The position on the face gave so much relief that she strictly followed the treatment. After five or six months the discharge ceased entirely, and within twelve months she was perfectly well, and has continued so up to the present time.

Dr. COPLAND regarded the paper as one of much interest. He himself was the first writer in this country who gave a detailed account of the diseases of the cæcum, the article appearing in his Dictionary thirty years ago. The two cases recorded by the author, in which portions of the cæcum and colon were thrown off, he believed to be unique, and the separation of the intestine could only have arisen from intussusception having been before present. He then referred to a case of cæcal fistula which had existed for nine or ten years, the fistula having closed and reopened several times during that period. The patient was still alive, but very much emaciated.

Dr. WEBSTER related the case of a young woman who presented symptoms like those detailed in the paper. Eventually a portion of the small intestine, twenty-five inches in length, passed per anum. She recovered from this, but died some time afterwards. The treatment pursued was similar to that which Dr. Reed had employed.

Dr. HABERSHON said the cases related were of extreme interest. He referred to a preparation in Guy's Hospital, which was presented some years ago by Mr. King. The patient was seized with sudden pain in the abdomen, producing great prostration. Eventually the appendix of the cæcum and a portion of the colon passed. The patient recovered. Dr. Habershon then referred to the occasional presence of diarrhœa in these cases, and mentioned an instance in which the purging was attended with such peculiar circumstances, that poison was suspected, but which afterwards proved to be a case in which the cæcum and ileum had pushed forward into the colon. With regard to treatment, as it was so important that adhesion should take place after the separation, he suggested that more opium and less mercury should be used. With this exception he agreed with the plan of treatment pursued by Dr. Reed; but might not his cases have succeeded as well if less mercury had been employed? He had seen several instances of cæcal fistula connected with cancer. In Dr. Reed's cases that disease was not present. He reprobated the use of purgatives in these cases.

Dr. WYNN WILLIAMS related the case of a patient who was suddenly seized with severe pain in the right iliac region, accompanied by great tenderness over the whole abdomen, vomiting, and constipation. He first administered three grains of opium and ten of calomel, the latter being given as a sedative; and the abdomen was covered with linseed-meal poultices. The symptoms abated, but a hard swelling was detected in the right iliac region. He was placed under small doses of opium, and poultices were used. The patient thought he had felt the tumour slip away from its position, but he remained well. Three months afterwards he was again called to the case, when the patient informed him that a tumour was pressing upon the rectum. The tumour was removed, and was found to consist of a large brown mass as hard as stone. It was sawn through, and its nucleus proved to be a plum-stone surrounded by layers resembling brown paper. The patient recovered.

Dr. STEWART agreed with Dr. Habershon regarding the treatment of invagination of the intestine. He had long since given up the use of purgatives in these cases, and was now in the habit of using an injection consisting of three or four grains of the extract of belladonna and a large quantity of water. This he had found usually successful. He related one case in which a second injection of belladonna was used in mistake for a common enema. The injurious effects of the belladonna were not developed, in consequence of the bowels having acted freely. He resorted to the same plan of treatment in cases of poisoning by lead, in which constipation and colic were prominent symptoms. The disadvantage of this mode of treatment was the occasional development of the poisonous effects of the belladonna, but he had only seen two cases out of twelve in which delirium had occurred.

Dr. O'CONNOR said the last case related by the author, as well as the observations of the last speaker, reminded him of a case which was under his care at the Royal Free Hospital about four years ago. It was that of a young man, eighteen years of age, having phthisis. He was in the hospital nearly two months. His general health became improved, and the disease for the time was arrested, when he was suddenly attacked with pain and great tenderness in the region of the cæcum. The following day there was general peritonitis, with uncontrollable sickness. Owing to the difficulty of his retaining anything on his stomach, he (Dr. O'Connor) ordered a suppository of fifteen grains of mercurial ointment, with one grain of opium, to be administered every four hours, and turpentine fomentations to the abdomen. Relief of the symptoms in a few hours followed; the peritonitis had subsided within twenty-four hours; the action of the mercury manifested itself by soreness of the gums; the bowels had been freely acted on three or four times, and some pieces of undigested oranges escaped. On the third day there were circumscribed tenderness, pain, and swelling in the region of the cæcum, which gradually increased. After a few days, in consultation with his colleague, Mr. Gant, fluctuation was felt. Mr. Gant made a free opening, through which a large quantity of fetid, purulent matter escaped. A probe could be easily passed into the cæcum. The fistulous opening in time healed, but the patient ultimately died of phthisis.

Mr. POLLOCK said he thought that the most important point in Dr. Reed's paper had been lost sight of. Cases of intussusception were not uncommon in which recovery occasionally took place from a portion of the intestine being thrown off. In Dr. Reed's cases, it would appear that a portion of the intestine throughout the entire circumference and length were thrown off independent of intussusception. Might not some other evil, in such cases, be anticipated to follow—for instance, a permanent contraction of the tube?

Dr. REED said, that in his cases portions only of the calibre of the cæcum and colon had come away with the entire appendix

ON THE POISONOUS EFFECTS OF COAL GAS UPON THE ANIMAL SYSTEM.

BY C. J. B. ALDIS, M.D.,

MEDICAL OFFICER OF HEALTH FOR ST. GEORGE'S, HANOVER-SQUARE.

The author was induced to make the present inquiry in consequence of the examination of gas, as to its purity, now forming an important branch of the public health. He also wished to ascertain whether cannel gas destroyed life sooner than common gas, since this question had arisen at a recent coroner's inquest. The third and fourth objects were, to counteract, if possible, by publicity, the want of precaution often displayed by gas-fitters in the discharge of their duties, and to try means for their recovery when rendered insensible.

The following are the results of some experiments made by the author, Mr. F. G. Evans, engineer of the Chartered Gas Company, and Mr. Bannister, assistant-engineer at the works in Horseferry-road, Westminster, November 8th, 1861:—

A rat was first killed by means of a sharpened file thrust into the brain, for the purpose of comparing the appearance of some of the internal organs with those of others destroyed by the gases. The eyelids were closed; the lungs collapsed, and of a whitish colour; both ventricles of the heart contained black coagulated blood.

Six experiments were then made—two with cannel gas, three with common gas, and one with foul gas—upon rats, which were placed, in succession, under an inverted glass vessel, into which the gases were passed through a ⅜-inch cock and tubing with a ¼-inch bore. The animals soon began to gasp, and became insensible after slight struggling. They lay motionless for a few seconds, when death supervened upon convulsive movements. The eyes were open and projected. The outer surface of the skull was exceedingly red in all that were examined, and dark fluid blood escaped from them. The superficial vessels on the surface of the brain were pinkish, and some were empty; the substance of the brain was pale. The lungs were collapsed, and of a pink colour; the heart was distended with darkish fluid blood; and the abdominal veins were congested. The eyes of the rat exposed to foul gas did not project so much as in the other examples. On opening the body a strong smell of sulphuretted hydrogen gas escaped. The brain and lungs were much congested and of a brownish colour; the heart was greatly distended with dark fluid blood, the auricles being nearly black; and the abdominal veins were distended with dark blood.

On November 6th, the author examined six rats killed at the works in the same manner as the last six just mentioned, all of which had died with their eyes open. The post-mortem appearances were similar.

In remarking upon the physiological results of the experiments, it may be observed that death ensued from the combined effect of different coal gases, the chief constituents of which are, after purification, light carburetted hydrogen, hydrogen, carbonic oxide, carbonic acid, oxygen, nitrogen, and the condensible hydro-carbons; whereas the foul gas contained, in addition, ammonia and sulphuretted hydrogen. Again, cannel coal gas contains more hydro-carbon vapours than common gas, for which reason it probably destroyed life more quickly than the common gas. The cannel gas supplied by the Chartered Company is made with a mixture of bog-head and Newcastle coal; while the common gas is made from Newcastle coal, enriched with a small per-centage of Wigan cannel. The impurities of common Newcastle coal gas, according to Lewis Thompson,* may be taken at ¼ part of ammonia, 8 parts of sulphuretted hydrogen, and 25 parts of carbonic acid in every 1000 measures of the gas. Dr. R. D. Thomson† gives the following analysis of London gas:—Olefiant, 3·86 per cent.; carburetted hydrogen, 38·93; hydrogen, 46·43; vapour of water, 2·48; carbonic acid, ·46; carbonic oxide, 5·62; nitrogen, 2·22. While testing the gases from the Chartered Company with Cooper's tube, which may be considered merely as an approximation to the truth, the author found that the common gas contained about 1 to ½ per cent. of carbonic acid, 4 to 5 per cent. of hydro-carbon vapours, ½ to 2 per cent. of carbonic oxide; but the cannel gas contained, of carbonic acid, from 1 to 1¼ per cent.; carbonic oxide, ditto; hydro-carbon vapour, 12 per cent.

On a post-mortem examination of five bodies of persons, quoted by Dr. Taylor in his work on Poisons, there was congestion of the brain and its membranes, the pia mater gorged with blood, and the whole surface of the brain intensely red, and the blood coagulated. In two other cases there was congestion of the brain, but the blood was remarkably liquid. The effects, however, produced by the coal gas were owing to its long-continued respiration in a diluted state, which may account for their difference, when compared with the results of the above experiments. In these the blood of only one rat was loosely coagulated in the left ventricle of the heart. The brains also of all, excepting that killed by the foul gas, were free from congestion.

Mr. William Bloxam, jun., has kindly favoured the author with notes of a case of poisoning by coal gas. The deceased was found on the top of a pair of steps, in a closet, in a sitting posture, his head on one side, his arms hanging down, and his back leaning against the wall. (He was connecting a meter.) It is worthy of remark, that he did not appear to have ever attempted to descend from the steps.

Autopsy, twenty-four hours after finding the body.—The blood everywhere was fluid; the brain and membranes by no means congested—rather pale than otherwise; the lateral ventricles contained much pale serum; no coagulum in the corpus striatum, optic thalamus, crus cerebri, cerebellum, nor other position. The brain and cerebellum apparently healthy. *A powerful odour of gas* on opening the cranium, and slicing the brain down to the corpus callosum. The lungs did not collapse on raising the sternum; and the cartilages were dark red—darker at the back of the lobes (from gravitation of blood); the tissue healthy. The trachea and bronchi contained frothy mucus in some quantity. On securing a bronchus, removing lung, and collapsing by pressure, *a very strong odour of gas was perceived.* Right side of the heart distended—left nearly empty; blood black everywhere; heart healthy; no signs of irritation or disease in the abdominal viscera; congestion of the abdominal venous system.

The author suggests that the deceased committed an error of judgment, which is too frequently the case, while adjusting the meter; for it appeared from an inquiry at the works, that he had connected the pipe with the meter first, instead of with the pipe from the main, which latter he was effecting with a running socket, so imperfectly united that sufficient gas escaped to destroy life. It will be evident that, as he was working with his head at the upper part of the closet on a level with the fan-light of the door, he should have been doubly cautious; for when the gas escaped, this part became a kind of gas-holder, and the deceased, having become insensible, was unable to lower his head beneath the frame of the fan-light, or had he but struggled and fallen, his life might have been spared. In numerous instances gas has appeared to act like an anæsthetic agent by rendering the men while at work comatose, many of whom, when removed into the fresh air, gradually recover. They complain generally of a pricking sensation, resembling that from pins and needles; there is stupor, with violent headache, giddiness, nausea, and sometimes vomiting. The countenance is puffy and livid, being of a dark bluish-black colour; they look tipsy, and are obliged to be led, their legs giving way from under them; and the breath smells strongly of gas.

The author made some further experiments with Mr. Bannister on Dec. 11th, which were conducted in the same manner as the preceding, except that the animals were rendered insensible only, and four were afterwards exposed to fresh air; but the others to the action of ammonia and fresh air.

Another experiment was made on Dec. 13th, when a rat was rendered insensible by means of common gas, and afterwards passed through water into a large glass vessel filled with oxygen.

From these experiments it appeared that the animals recovered more quickly when exposed to fresh air than when other means were adopted.

Dr. KIDD remarked, that the case related resembled poisoning by chloroform, where convulsions invariably preceded death.

Dr. BARNES related a case of poisoning by coal gas which he had witnessed in the street. The patient was found perfectly insensible, and lying on his back. His countenance was of a dark, livid, leaden colour. He applied ammonia to the nostrils, and administered some to the mouth. The patient, being exposed to the open air, soon recovered. The blue colour present in this case was much more striking than that observed in cases of poisoning from chloroform, and the symptoms were very distinct.

Dr. MARCET observed that it would be of interest to determine which were the constituents of coal gas possessed of poisonous properties, and ascertain their mode of action. He reminded the Society of the extremely dangerous nature of carbonic oxide—a substance constantly present in purified coal gas; and alluded to a case of Dr. Taylor's, reported by the author of the paper under consideration, where—if he (Dr. Marcet) had not misunderstood Dr. Aldis's statements—after death from the inhalation of coal gas the blood was found red in the vessels of the brain—an obvious indication of the fatal effects resulting, in this instance, from the action of carbonic oxide; otherwise that blood would have exhibited a dark venous colour. Dr. Marcet believed the hydro-carbon (light carburetted hydrogen and olefiant gas) constituents of coal gas acted very differently from the carbonic oxide. Carbonic oxide produced death by altering the properties of the blood-corpuscles, a fact discovered by Professor Bernard; the inhalation of light carburetted hydrogen and olefiant gas gave rise, in all probability, to symptoms of anæsthesia, as would result from chloroform, only causing death when in a concentrated condition—namely, by paralysis of the muscles of respiration, or by cardiac syncope. He also thought fatal effects from the inhalation of gas may be due in some cases to asphyxia from spasm of the glottis, and offered several arguments in favour of this view.

Dr. ALDIS remarked that the term "asphyxia" was often loosely applied to cases of death from coal gas, as if it resulted from the mere absence of air; whereas he believed, from the symptoms which followed the inhalation of coal gas, that the system became affected by a sedative poison. Great negligence was too frequently displayed by gas-fitters while discharging their duties, whereby the public health and property were jeopardized; but he was glad to mention that in consequence of the great fire which had occurred in Wood-street and other accidents, Mr. Simmons, of New Palace-yard, had invented a gas-connector. He had seen the machine in operation, and could say that it was easily managed, and safer than the old plan of cutting a hole in the main. It was provided with a drill and valve, which, by preventing the escape of gas, rendered the instrument both economical and safe, the men being able to work without risk to life and destruction of property.

* Chemistry of Gas Lighting, p. 34.

† Evidence on Gas (Metropolis) 1821, 3323, June 29th, 1860.

Reviews and Notices of Books.

Petersburger Medicinische Zeitschrift. 1 Jahrgang, 1861. 1—5 Heften. sm. 152, mit Lithographirten Tafeln. St. Petersburg: Schmitzdorff.

ALTHOUGH the profession in Russia is provided with several serials in the native language which keep our brethren in the north *au niveau* with the latest advancements made in other countries as well as in their own, yet the position of medicine in Russia must be regarded as a more or less isolated one. The

Russian language is so little known beyond the limits of the kingdom, that foreigners can scarcely be said to be aware of what is doing within them, however well the higher class of medical men there are acquainted with what is going on without. We are not surprised that there should be a strong desire upon the part of the more educated of the profession in Russia to come directly into communication with the outer world, and to let us know what Russian medicine is capable of performing. It has become evident to them that this can only be attained through the medium of the German language. Several of the St. Petersburg *Medicinische Vereine* have therefore made themselves responsible to the imperial librarian, H. Schmitzdorff, for the expenses of publishing a periodical devoted to the interests of Russian medicine. Of this journal we have lately received five parts; and having perused them, we can safely say that medicine in Russia is not behind that in any other European country. The pages of this new journal show as happy a combination of the scientific with the practical as could possibly be desired. That our brethren on the Neva are in the van of science may be seen by the following extract, which we translate from a paper in the third number (Dr. Knock on the "Helminthologia of Russia"):—

"It is a remarkable fact, that amongst the many—nay, even very numerous—investigations and experiments hitherto made, both in Russia and out of it, relative to the cestoid worms, that of these only the *tænia*—even the very inoffensive (according to Von Siebold) *tænia cucumerina* of the dog—have been objects of the multifarious experiments made in connexion with food. In respect to *bothriocephalus latus*, as yet not any investigations have been undertaken (even in countries like Russia, Switzerland, and Sweden, where this parasite of man so abundantly occurs) which demonstrate the hitherto quite unknown method of development and metamorphosis of this parasite in the human frame. Even amongst the repeated experiments in connexion with the cestoidea and food which the professor of veterinary art, Ostrowsky, in Charkow, instituted with his colleagues, the *bothriocephali* were unfortunately overlooked. Nevertheless, it is directly the province of Russia, as it is of Switzerland and Sweden, to throw light upon the still enigmatical development and metamorphosis of the *bothriocephalus latus* in man, thereby at length setting aside the usually accepted hypotheses, which possess but very little probability, or are even entirely false.

"Switzerland has as yet done less than even Sweden and France to solve the interesting problem, although the learned Haarlem Society of Holland offered, in 1859, a double prize relative to the natural history of the broad tapeworm; although Professor Sparkes, as far back as 1824, in his 'Historia Helmintheca,' especially reminded physicians, and particularly those of Russia, 'ut animi attentionem *bothriocephala lata* non denegent;' and although Küchenmeister, in his work 'On Parasites,' expressed with the greatest confidence his belief 'that his colleagues who reside in bothriocephalous districts, particularly on the sea-coast, would not allow us to be long destitute of the desired solution.'"

Of Russia we can say, with much satisfaction, quite the opposite. Eighty years since, Pallas—Russia's most eminent investigator—as before him the great naturalists, Linnæus of Sweden, and Bonnet of France—earned considerable repute on account of their descriptions of *bothriocephalus latus* and its varieties.

"We ourselves, during a residence at St. Petersburg, had the desired opportunity of observing the development of this entozoon, and the metamorphoses of its ciliated embryo in water, as also its ultimate transference to the mammalia through the medium of river water as drink. The results of these observations, which were in 1859 and 1861 partly detailed in the 'Bulletin' of the Petersburg Academy of Science, are about to appear in a complete and illustrated form in the Memoirs of the same Academy and in the *Military Medical Journal*. Whilst referring my respected colleagues and such naturalists as may be particularly interested in these inquiries to the sources of information in question, I may here bring forward the attained results—two of which are of general importance, and just now invite our particular attention. The first is, that the embryos of *bothriocephalus latus* develop their ova only after remaining months in fresh water (i. e., of rivers and lakes); in river water, as infusorial, ciliated organisms, moving actively about by means of their cilia for several days, and finally becoming transferred in a passive way through the same medium (river water used as drink) to the human system. Secondly, according to our own observations, there are two species of *bothriocephali* common to man, and not a single one only, as hitherto supposed. Three species of the broad tape-worm, as Pallas describes, are not to be found in man."—p. 77.

It will be seen by the above that the Russian physicians and naturalists are about solving a riddle which has not a little puzzled the scientific world. We wish the *St. Petersburg Medical Journal* every success.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

To the Editor of THE LANCET.

SIR,—As appeals to the profession have lately been put forward on behalf of the Royal Medical Benevolent College, and the Medical Benevolent Fund, allow me (with no desire to interfere with, or in any way to depreciate, the value of these two most excellent charities, which will, I sincerely hope, receive the support they so urgently need) to draw the attention of your readers in and near London to the merits of the older Society—namely, "The Society for the relief of Widows and Orphans of Medical Men in London and its Vicinity," which has very recently extended its rather contracted limits to the whole extent of the London district-post, including a few parts of Middlesex which are not within that circle.

The "Widows and Orphans'" Society gives half yearly a sum of money to each widow, and child under fifteen years of age, of those of its members enrolled for at least the two years immediately preceding their decease, who are left with "no certain income or provision whatever" exceeding certain amounts respectively, as set down in the laws of the Society. Of these applicants I can say, that very many were in absolute want when their first application was made.

This Society is now in the seventy-fourth year of its existence, and is consequently enabled to expend considerable sums in relief; yet frequently application is made to it, or to the other Societies, by widows and children of medical men in great distress, whom this Society cannot assist, because the husband or father had never even offered to become a member, and who are therefore driven to other sources of relief. In corroboration of this I may state, that the largest number of members at one time ever known in this, "the Widows and Orphans'" Society, is now a little above 400, out of some 2000 practitioners who have long resided within its previous limits. Why is this? is a question often asked. I am unable to state the reason; but the conditions of membership certainly warrant much greater support than is at present given by the profession at large. These conditions are: election as members by ballot, one guinea entrance fee, and the same half yearly as a subscription during twenty-five years. Since October, 1788, 1261 members have been admitted: of these, 1211 were elected more than two years ago, 372 of whom are still living; so that the number of persons who have ceased to be members is 839. From these, 133 families had been relieved, or 1 to every 6·30 members. These 133 families comprise 122 widows, and 188 children, who have received half-yearly and other relief. Last year £1841 was spent in "immediate" and "half-yearly" relief amongst 41 widows and 18 orphans, besides £140 in grants "towards self-maintenance" amongst 5 orphans, and £25 in "extra relief" in cases of serious illness; thus making in all £2006 given away in one year. The capital of the Society was also increased by £775 3*s.* 4*d.*, Three per Cents.; but not, as we conceive, in proportion to the increasing demands for relief.

In conclusion, allow me to state that the required proof of the circumstances in which the applicants are placed in consequence of the decease of their husbands or fathers is by no means difficult, and that it is never made public, every care being taken to prevent the incomes of the applicants becoming noised abroad.

I shall be happy to communicate with any person who desires to gain further knowledge of the Society.

I am, Sir, your obedient servant,
S. W. J. MERRIMAN, M.D., *Secretary.*

53, Berners-street, Jan. 1862.

THE CHOLERA IN INDIA.—Cholera has broken out in Bombay.

THE LANCET.

LONDON: SATURDAY, JANUARY 25, 1862.

THE discussions which have recently taken place at the Académie de Médecine in Paris, relative to a comparison of the French and British hospital systems, and the rates of mortality associated with them, have naturally excited much interest amongst ourselves. It was in these pages that attention was first drawn to the subject, and that by our special correspondent in the capital of France. Since our original notice of the discussion in question, a fuller exposition of the general argument has been laid before the profession by M. le Docteur LEON LEFORT.* This gentleman some time since remarked an evident difference, to the disadvantage of France, in the rates of mortality following the performance of amputations in the Parisian and British hospitals. It appeared probable to him that it might depend partly upon certain less perfect conditions of the French hospital system, and partly on the treatment adopted after the operations. He determined to elucidate the important matter by visiting the British institutions. He had completed twelve years' study amongst the hospitals of the French capital, when he took three journeys to England, and spent seven months investigating the establishments for the sick amongst ourselves. Besides this, the campaign of Italy, in 1859, gave him an opportunity of studying the details of hospital systems in Italy, as carried out at Genoa, Milan, and Venice. Nor did Holland escape his notice. Having reflected for three years upon the knowledge thus gained, M. LEON LEFORT has been induced, through the interest excited by M. GOSSELIN'S statements, to submit the opinions he has formed to the profession generally. These turn out to be not by any means to the advantage of the French system. Between this and our own public medical *régime* there is, no doubt, a vast difference throughout their whole organization. As M. LEFORT points out, the sources of its emolument, the duties imposed upon it, and the charges it undertakes, its economic and medical administrations, and its relations to medical education, vary very greatly in the two countries. After an unprejudiced consideration of the entire subject, the conclusion M. LEFORT has arrived at is, that whilst at Leyden the model school of anatomy is to be found, in England the best hospitals and museums are to be met with. M. LEFORT'S summing up is as follows:—

"The hygienic conditions of hospital establishments are, in almost all respects, superior in England to Paris, and our own institutions for the sick are not, *quoad* the patients, of the great value such places are in the United Kingdom. To such who would systematically deny this conclusion, I would reply, If there be any physiologic or morbid state admitting of a possible and exact comparison, in regard to which no reference need be made to difference of treatment, but which is specially under the influence of the hygienic conditions of a hospital, it is the puerperal condition. Well, then, in a London hospital (Guy's), during a period of seven years, and in 11,928 deliveries, the rate of mortality was 1 in 331, whilst there has died 1 in 13 for the last ten years at the Maternity of Paris."

With reference to this last sentence, it must be borne in mind that the patients of the Maternity department of Guy's and other London hospitals, are not delivered in the walls of the hospitals, but at their own homes. Hospital obstetric succour is almost as fatal in London as abroad. At this moment two of the London lying-in institutions are closed, as the only means of suppressing puerperal fever.

If we take the whole mass of patients of the French hospitals, we shall not find the rate of mortality very different from that which prevails in the hospitals of Great Britain. But when we select certain classes, such as those comprehending acute and grave diseases, and especially those involving the performance of amputations and other capital surgical operations, the difference is seen to be very considerable. But under any circumstances there is something in our favour. At Guy's, during a period of six years, the general rate of mortality has been 1 in 10·8 patients; at Glasgow, 1 in 13·3; in Paris, 1 in 7·04, with the exception of the Lariboisière, where it is 1 in 8·73. But when amputations, of the thigh for instance, are appealed to, the contrast is indeed striking.

"Rejecting the statistics of facts scattered amongst scientific journals in favour of those of hospitals only, during a certain number of years, I have arrived at the following results:—By the side of 489 amputations in England, comprising 327 recoveries to 162 deaths, or 32·9 per cent. of mortality, the statistics of M. Malgaigne of the hospitals of Paris, give the numbers of 201 amputations, comprising 75 recoveries and 126 deaths, or 62·6 per cent. of mortality—a rate nearly double that of England."

As might be expected, the statements of MM. GOSSELIN, MALGAIGNE, and LEFORT have been vigorously opposed, and M. DAVENNE has maintained that the manner in which the Paris hospitals are conducted is far superior to that of the British system, and that the vaunted statistics in favour of the mortality of the latter are utterly fallacious. If our readers will refer to M. LEFORT'S memoir, we think that they will be satisfied with his reply to M. DAVENNE. But, in truth, the late discussion at the French Academy, however important, cannot be said to have grappled with a new subject. We learn from the medical correspondent of a French journal that Dr. MOFFAT presented an able paper to the French Government some years ago, which attracted at the time much attention. Unfortunately the interest soon evaporated, though Dr. MOFFAT sought to prove in his paper, that while the mortality in the Paris hospitals was 1 in 8 of all the patients admitted, the mortality in the London hospitals was only 1 in 12, and in the Scottish hospitals still less. Upon other points, however, Dr. MOFFAT differed from the more recent investigators. He thought that the general and economic administration and hygienic conditions of the French hospitals were superior to those of London. This being the case, and there being a larger number of less serious maladies admitted into the French than into the English hospitals, Dr. MOFFAT was forced to the conclusion that the greater mortality in the Paris institutions must be accounted for by an inferiority in the treatment therein adopted. One great error of some of the Paris hospitals consists in the excessive crowding of the wards. Thus there is one ward, and that a surgical ward, at the Hôtel Dieu, in which we have seen ninety patients. No ventilation can avert infection under such conditions.

* Note sur quelques Points de l'Hygiène Hospitalière en France et en Angleterre. Par le Docteur Léon Lefort, Prosecteur à la Faculté de Médecine de Paris. pp. 48. Paris: Masson. 1862.

Into the causes of the superiority of our own hospital system, according to recent doctrines, more particularly as expounded by M. LEFORT, we shall take an early opportunity to inquire. Suffice it now to say that, considering the difficulties which must always surround the attempts of a foreigner to become minutely acquainted with the general and specific administration of our public and charitable institutions within a limited space of time, we must regard M. LEON LEFORT as having honestly and fairly attained his object. The subject of hospital construction and administration is one of immense and universal interest. It deserves to be discussed in a cosmopolitan spirit. The medical profession in all countries may profit by mutual intelligence.

OUR readers will remember, that on several occasions during the last three years we have deemed it necessary to draw their attention to the bad condition of the Jamaica Hospital and Lunatic Asylum, and to the charges of grave mismanagement brought against their directors and officers by one of the leading physicians in the island. The subject was a serious one, not only in itself, but as having wider bearings than might be supposed by those unacquainted with the general *régime* of our colonies; for there is too good reason to believe that the state of the institutions in question is far from being solitary or exceptional either in Jamaica or in the other West India islands. That the Kingston Hospital and Asylum were so thoroughly defective in their sanitary and other arrangements as to unfit them for the purposes for which they were designed, has long been known to the resident professional men, and ten years ago their condition was pointed out in the official report of the medical Commissioner sent out from the mother country. The spontaneous upspringing of disease and the excessive mortality in both institutions, not only in epidemic years, but at all times, afforded conclusive evidence that the cause of the mischief was from within. But notwithstanding the repeated warnings given, nothing was done by the authorities, and of course things became inevitably worse and worse—more disease was generated, and more of the wretched creatures taken in to be relieved died. Nor does there seem to have been any prospect of a change in the state of matters down to the present moment, had not Dr. BOWERBANK, who had long evinced an active interest in the sanitary condition of his native country, taken up the subject, and by the energy of his public appeals, forced it on the unwilling attention of the authorities. In spite of opposition, not only from the parties incriminated, but from others high in place and power, he resolutely stuck to the task he had imposed upon himself. Baffled, by the influence brought to bear against him on the spot, in his project of having the question thoroughly examined by an independent Commission, he came over to this country, at no small personal sacrifice, in the hope of inducing the Colonial Office to give the necessary instructions for the enforcement of such an inquiry. Here again he encountered disappointment; but his exertions were far from being of no avail, for by bringing the state of the Lunatic Asylum, and of its inmates, before the Lunacy Commissioners, he succeeded in obtaining a strongly-expressed opinion as to their disgraceful condition—an opinion that was officially communicated to the Secretary of the Colonies. Such a communication from one Government Board to another could not, of course, be allowed to pass without some action, and the result was, that the Governor of Jamaica was called on to institute an inquiry by a competent local tribunal into the truth of the inculpatory allegations. After much delay, a Commission was at length appointed, and set to work. The Report of the Commissioners, issued last November, is now lying before us, the names affixed being ALAN KER, A. G. FYFF, and ROBERT HAMILTON, M.D. Cantab. It bears the impress of a most patient and sifting spirit of examination, and of a fair and conscientious judgment, and it cannot fail, we think, to carry weight with the official as well as with the public mind throughout the colony.

It is unnecessary to revert to any details of the constructive and sanitary defects in the buildings; they are so notoriously faulty as to defy all contradiction. Suffice it to say that it is a sad scandal to any Christian community to have allowed institutions with the sacred names of Hospital and Asylum to be from year to year so thoroughly neglected, maintained, too, as they were at a large annual outlay of the public money. But alas! their management and direction were only on a par with their bad sanitary condition. The Report admits that the Governors—men, be it observed, of good standing in society, and most of them members of the Legislature—not only grievously failed in the obvious duties of justice and humanity towards the sick inmates, but that some of them were guilty of the most shameless prostitution of their influence for the purposes of personal and not always commonly honest gain. The House of Assembly, too, is directly charged with repeated grave dereliction of duty, by appointing Committees of Inquiry, and then taking no notice of their Reports, and by manifesting utter indifference when the Government itself proposed measures for the improvement of the institutions. We regret to add that the medical officers have not been exempt from blame, and that on matters directly affecting the sacred duties of their calling, as in respect of the conscientious selection of the proper objects for admission into the charities, as well as of affording the best and most prompt professional aid in their power to all sufferers alike. The subordinates, of course, took their cue from their superiors, and lamentable indeed were often the results. Moreover, many moral irregularities prevailed at times in the institutions; and, as a climax to the whole, we are told that "the Coroner on more than one occasion refused "to hold inquests when the circumstances of the death de-"manded an inquiry."

Dr. BOWERBANK, having recently become a member of the Legislature, will have now the opportunity of not only seeing to the improvement of the above institutions, but of introducing, we hope, other measures of social and sanitary amendment, of which Jamaica stands so much in need. May he be long spared to reap the just reward of his enlightened, humane, and disinterested labours!

IT is very satisfactory to hear that the main grievance of the Army Medical Department, which we have several times lately brought under the notice of the profession, is at last likely to be settled in a fitting manner. A deputation of army surgeons waited upon Sir G. C. LEWIS last week, and were informed that the subject had been referred to a committee of experienced officers, by whose opinion the ultimate decision would be very much influenced. That committee was composed of the Adjutant-General and Quartermaster-General, Sir E.

HAWES, Sir E. LUGARD, and Dr. GIBSON, the Director-General. It is stated that the result of their deliberations is, that the retrogressive Warrant last issued will be cancelled, and that medical officers will be reinstated in the privileges accorded to them by the Warrant originally issued under the auspices of the late Lord HERBERT. They will thus be entitled to the full privileges, including precedence, choice of quarters, &c., belonging to the grade to which their own is relatively equivalent, with the exception of actual military command.

Thus the War Office retraces its late retrogressive steps. We congratulate the medical officers upon this just concession to their claims. It has been in no small degree due to the strong feeling of the civil branch of the profession in their favour, which has found expression in these columns. The interests of the military and civil branches of the medical profession are identical. The Army is furnished with surgeons from the general body of students at our hospitals, and the number and quality of those willing to accept military service will always be greatly affected by the opinion prevalent as to the treatment of the Army medical officers. The present return to a liberal and just policy will be viewed with general satisfaction, and will thus favourably influence the future supply of candidates. The public service will undoubtedly benefit by this act of justice to a zealous and devoted body of officers. It may be reasonably hoped that a similar measure of justice will be awarded to the naval medical officers.

DOES the licence of the College of Physicians entitle its possessor to practise as an apothecary?—that is, to attend, prescribe, and dispense medicine, in a medical case, for gain. This is a question still to be decided by law or equity. The Society of Apothecaries have given notice to the College that they intend to prosecute the first licentiate of whose practice as an apothecary they can obtain sufficient proof. The Society rely upon the Act of 1815, and contend that under that statute the prosecution they contemplate will terminate with a verdict in their favour. The College rely upon what they regard as antecedent and inalienated rights.

Medical Annotations.

"Ne quid nimis."

ST. THOMAS'S HOSPITAL.

THE servants of the Charing-cross Railway Company commenced on Monday to take forcible possession of the garden of the north wing of this hospital, with a view of commencing operations for the proposed railway, in accordance with the recent decision of the arbitrators between the contending claims of this railway company and the authorities of this institution, by which the latter were awarded the sum of £296,000 in compensation for the building and grounds. In consequence of this unwelcome irruption the hospital authorities made an application to Mr. Combe, at the Southwark Police Court, who, however, declined to interfere in the matter, which properly came within the jurisdiction of the Court of Chancery. An application, therefore, was forthwith made to Vice-Chancellor Wood, who immediately granted an injunction to restrain the company proceeding in the work of demolition.

Mr. Solly properly appeals to public opinion to condemn this Goth-like invasion of the hospital before a proper refuge has been found for the patients. It was certainly an implied condition of the contract that time should be given to construct elsewhere a fitting building for the reception of the patients before demolishing the noble pile which now shelters 5000 patients annually, and treats weekly 1100 out-patients and casualties. Public policy and common humanity demand that this understanding be religiously observed.

SURGEONS AND ALMONERS.

A MOST humane and warm-hearted gentleman, Mr. Alfred Ebsworth, F.R.C.S., district surgeon, Newington, wishes to direct some portion of the misapplied charity of this large city into the hands of the district medical officers, for the great saving of life and to benefit the really deserving poor; and we wish his benevolent efforts every success. He appeals to the public through *The Times*, and states his case thus:—

"I wended my way this morning through the courts and alleys of Kent-street, and the inhospitable region of Lock's-fields, visiting the sick poor of a large parochial district, and marked the rapid strides of disease and destitution after the access of a few days' intense cold; and I ruminated as to what would be the best mode of dealing with the one and the other. The Poor Law can and does deal pretty well with the matter; but the medical officer, compelled by the nature of his office to visit innumerable cases, sees around him a mass of misery, real and unaffected, which he cannot alleviate unless he has at his command a fund to which he can at once resort. That old woman with bronchitis, for want of a morsel of coal during the night, will swell the bills of mortality in the morning. This puerperal case, having no warmth, has gone wrong; or a fevered child has the fever driven in upon some vital organ. A shilling here, or a sixpence well spent there, will save a great number from a frightful death, from cold and starvation. Could I direct one of the streams of charity, I would fain ask the charitable to consider whether they could not give to those medical officers whom they know a portion of their contributions at this inclement season. They would know then that those who really are sick and ill would not be confounded with the sturdy and importunate beggars who besiege us in every quarter in the streets and lanes. Our duties are never finished: in the midnight we are at our posts, with wretchedness and misery at the bedside, unseen except by such as us. Would that this appeal might be liberally responded to, and many a sick and sorrowing family will have cause to rejoice at your notice of my letter."

It cannot be doubted that the surgeons of hospitals, dispensaries, and Poor-law districts might greatly enhance their already inestimable services, if entrusted with funds to relieve some part of the destitution which underlies the disease with which they do battle.

A NEW DOMESTIC POISON.

BENZOLE is an organic product of distillation which ranks high amongst the recent useful gifts of chemistry to our national industry. It has lately come into extensive use for a variety of purposes, and has not hitherto been considered poisonous. A recent death has given occasion to investigations which prove that it is highly poisonous. At the inquest on George Gilbert, who died on the 3rd instant, it appeared that the deceased, after sucking at a syphon which did not draw, inhaling the vapour of the benzole, and probably swallowing a portion of it, became sick and drowsy, his pulse feeble, and countenance livid. Dr. H. Barker was called to him, and he was treated with stimulants, but died in a few hours. The symptoms were those arising from the inhalation or swallowing of a noxious fluid. There was no trace of irritant substance in the stomach, nor had it any smell of bitter almonds. The brain, lungs, and liver were congested, and there were some patches of congestion on the coats of the stomach. The head had a slight smell of bitter almonds.

The Coroner very properly ordered an adjournment, so that the real character of an article in such general use might be ascertained. This purified benzole, nitro-benzole, or myrbane, was found to contain a large proportion of prussic acid, and hence to be a very dangerous poison. This cannot be too widely known, since the substance is largely used as a flavouring agent.

OUR INFANT MORTALITY.

THE enormous mortality of children continues to be a great stain on the honour and a heavy burden on the conscience of the nation. It arises from causes of which many are beyond the control of the health officer, who, however, should never cease to perform the duty of pointing to the blot. In the metropolis this quarter, according to the report just published, the numbers are in the annual proportion of 23·1 per 1000 of the inhabitants of the Eastern district, 23·6 of the Western, and 21 of the Central, making together an annual death-rate of 22·4 per 1000 for the entire city. The average mortality in all England during the autumn quarter is at a yearly rate of 21·8 per 1000, and in the chief towns of England it is 24·9. Thirty-eight per cent. of all the deaths were amongst children of less than 5 years of age, and nearly 20 per cent. amongst old persons of 60 and upwards; 13 per cent. were amongst adults at from 20 to 40 years of age, and 19 per cent. at from 40 to 60. These are nearly the proportions of former years. Looking, however, at the numbers which have contributed to this aggregate, it will be observed that the mortality at different ages in the several districts of the city has not been equally distributed. In the Eastern district, for example, the mortality of children has been 50 per cent. of all the deaths, whereas in the Western it has been only 36 per cent. Both of these divisions of the city have nearly the same kind of population, and we cannot point to any especial cause for this high death-rate of children in the first-named district but the great density of the population. In the Eastern district there are 266 persons to an acre, whereas in the Western there are only 200, and in the rest of the city but 105. In the whole of the metropolis, with a density of only 36 persons to an acre, the mortality of children under 5 years of age is nearly 42 per cent. of all the deaths. What wonder, then, that in a district so closely packed as the Eastern the infant mortality should rise to 50 per cent.?

Density of the population is one great cause of infant mortality, because with it is coincident an unhealthy aggregation of the poor and destitute. With poverty and deficient education walk hand in hand neglect and ignorant maltreatment of children. The mortality of the children of the poor exceeds enormously that amongst the children of the rich. The former are ill-fed, uncleanly kept, brought up by hand in numbers, and often drugged. The inattention, through ignorance and out-door occupations, of mothers, is one of the most fertile sources of mortality amongst children. This is to be reached by social rather than medical hygiene.

FEVER AMONG THE RICH.

FEVER, fighting for each foot of ground against the preventive physicians who seek to assail its strongholds, has retreated from the haunts of the poor to the houses of the rich. An efficient body of health officers have occupied themselves in this metropolis with driving fever from the filthy purlieus of the poor; they have swept away the abominations which invited it to those favourite camping-grounds. In the city alone five thousand cesspools have been removed, and with them the cohort of zymotic fevers which dwelt in the brooding miasms of their surrounding atmosphere. The poorest neighbourhoods are now well drained, and kept free from sewer gas and the like sources of disease.

During the last few years the mortality from fever was so much lowered as to give signs of the manifest success with which the officers of health had fought the good fight. But fever has found a new refuge, and again deals widely its fatal strokes. The houses of the rich have not the intelligent care and supervision which by law are given to the dwellings of the poor. This defect has been much debated by the health officers, and recently at their meeting it was resolved, in discussing a paper by Mr. Lyall, pointing to this want, to obtain powers for the health officer in respect to the construction of new dwellings, in some measure correlative with those given to the district surveyor. The wealthy have left open in their houses loopholes through which fever can enter by gullies, untrapped drains, and similar defects of sewerage. The enemy has entered, and the middle and upper classes of the metropolis are now suffering from typhoid fever—the fever of filth, of sewage gas, and of tainted water. The returns of deaths from this cause, which had fallen, are now rising again. The increased mortality is not amongst the poor, for they are still in their former favourable condition in this respect. In the autumns of 1859 and 1860, when the mortality from the disease was not nearly so high as it is now, the number of fever cases attended amongst the poor by the medical officers of the City unions was from 301 to 313 in the quarter—making an aggregate of 10 per cent. of the sickness returns; but during the quarter which has just expired the number of fever cases amongst the City poor has been only 76, which is barely 3 per cent. of all the sickness. No fact can indicate more strongly the migration of fever to the houses of the upper classes. They too must call in the systematic supervision of the health officer.

THE CATASTROPHE AT NEW HARTLEY COLLIERY.

THIS dreadful accident, by which 215 men and boys were entombed in the earth, brings forth—as all serious calamities do—the eagerness with which medical men rush forward to alleviate suffering and to save life. In the account of this fearful catastrophe which appeared in *The Times* of Tuesday, the following paragraph occurs:—

"Every preparation was made, and a large staff of surgeons were to remain in attendance; but it is to be feared that it will be many hours before the men are extricated. *There are surgeons on the bank ready to follow the most daring miner down the pit.*"

Such feelings of charity and disinterestedness cannot be too highly applauded. To the surgeon no risk can be too great, and no obstacle insurmountable, provided suffering humanity can be relieved. In all instances of great calamities, the medical mission towers above all others.

THE COMMISSION OF LUNACY ON MR. WINDHAM.

NOTWITHSTANDING the course taken by some other journals, we still adhere to our intention of not entering upon a discussion of the Windham case until the proceedings before the Master in Lunacy are fairly concluded. Nothing can be more injurious to the interest of science and of justice, than the premature discussion of cases still before the tribunals, and whilst material facts and reflections may yet be unknown to the public. Extraordinary as are the disclosures, and protracted as is the trial, there is nothing that justifies the dealing with the case in an exceptional manner.

THE LATE DR. HENRY DAVIES.

To the Editor of THE LANCET.

SIR,—In the notice in THE LANCET of the 18th inst. of the death of my father, Dr. Henry Davies, it is stated that he entered the profession as an assistant-surgeon in the *Navy*. This is a mistake. My father was never in the Navy; he was in the Army. He began his professional career as Army hospital assistant in 1803. In 1808 he was appointed assistant-surgeon in the 48th Foot. He was afterwards assistant-surgeon in the 15th Light Dragoons, while that regiment was commanded by the late King of Hanover. In 1811 he was appointed surgeon in the 102nd Foot, and three or four years later in the 100th Foot. In 1818 he was placed on half-pay, in the receipt of which he continued until his death.

I am, Sir, your obedient servant,

Devonshire-st., Portland-pl., Jan. 1862. H. TUDOR DAVIES.

THE INFLUENCE OF RAILWAY TRAVELLING ON PUBLIC HEALTH.

Report of the Commission.

IV.

THE first step towards the investigation of the Influence upon Health of any given cause is to estimate accurately the physical and mental conditions it produces, and determine their physiological relations to the healthy body. This has been done for railway travelling, for the first time, in these reports. It was the more necessary because the effects are of subtle and complicated character; and because habitual railway travellers are subject to many various disturbing causes in their other relations of life to which no cognizance is given. It is, therefore, essential to have some means of correcting even actual experience by a rational investigation into the causes, character, and extent of the symptoms induced. There can be no doubt that hitherto many ailments have been credited to this cause which had a very different origin. On the other hand, there is reason to believe that many persons have treated the effects produced with undue carelessness, and, not being sufficiently on their guard, have suffered from persistence in a habit injurious to them.

But in place of the many vague surmises heretofore hazarded on this subject we can now substitute accurate information as to the direct physical effects of railway travelling upon the body. These are, to produce a certain degree of muscular exertion; to increase the volume of air inspired; to quicken the circulation; to impress rapidly on the retina a succession of fleeting images; and to cause more or less hyperæmia of the brain and spinal cord, and some irritation of the gastric and sympathetic nerves by means of the vibratory movements of the trunk. Bearing in mind this general analysis of the effects of railway travelling, and giving due consideration to the circumstances which modify them, it becomes possible to estimate at their true value the complaints as to the various illnesses and diseases which have been ascribed to it. In no case is it more desirable to test, one by the other, clinical experience and physiological observation.

Influence on the brain.

The pathological effects of railway travelling on the brain may be divided into two heads—1st, those which are the result of railway travelling where the brain is not previously diseased; and 2ndly, those which are observed to follow where the brain is already the subject of existing disorder.

It may perhaps be asserted that, unless a predisposition to brain disease exist, railway travelling is not likely to be productive of cerebral disturbance. The vast number of instances in which passengers and railway officials have habitually passed much time in travelling without suffering from brain disorder, favours that opinion. But much evidence has been laid before us to show that, where such predisposition does exist, railway travelling may become the exciting cause of cerebral disease. The first and most common symptom of disturbance thus produced is sleeplessness, with noise and singing in the ears. This is the earliest troublesome symptom of overwork amongst the experienced engine-drivers and guards. It has been especially complained of after some of the excessively long journeys—as to Manchester and back—which a parsimonious and most dangerous policy has recently imposed on them. The following case seems to illustrate the furthest and most serious effects of this kind of cerebral disturbance:—

Case of cerebral disease, by J. Sharpe, Esq., Waltham-cross.

"I have a case of a gentleman, with whose constitution and personal habits I am intimately acquainted, who for the last twelve years was actively employed by a large firm in business connected with the chief stations on all the principal lines. I may say he almost lived upon the lines. For some time he was unable to sleep at home in his bed, missing, as he said, 'the noise and motion of the rails.' His excitement has very much increased during the last twelve months, and he is now compelled by direction of his medical attendant totally to abstain from business and rusticate in the country. His brain is now showing decided symptoms of softening, and I much question whether he will ever again be able to resume business in any shape."

This may serve to illustrate the most distinct and marked effects of continued railway travelling where there is a tendency to softening of the brain. In such cases, Dr. Brown-Séquard, Dr. Forbes Winslow, Dr. Russell Reynolds, and other authorities, concur in considering railway travelling to be especially contra-indicated.

Case of cerebral disease, by Dr. Brown-Séquard.

Dr. Brown-Séquard has communicated to us some particulars of an instance in point, of a gentleman the subject of brain disorder diagnosed as a congestive affection of the pons Varolii. This patient resided a short distance from London, and the effect of a brief railway ride to town for the purpose of consultation, was found distinctly and injuriously to increase the twitchings and pains in the limbs (of the opposite side) which characterize this form of brain disease. This undesirable effect of railway travelling was so marked that Dr. Brown-Séquard found it necessary to prohibit his patient from coming by rail; and it was found that coach travelling was not productive of the same symptoms.

Cases of affection of the nervous system, by Dr. Radcliffe.

The following important cases of affection of the nervous system distinctly resulting from railway travelling have been communicated to us by Dr. Radcliffe. They are especially interesting from the fact that, in both, no other treatment was adopted than the cessation from travelling by railway, and that the symptoms recurred immediately upon the patients' resuming the practice:—

"A hale and stout gentleman, aged sixty-three, came to me, complaining of inability to sleep, numbness in the limbs, great depression, and all the symptoms of approaching paralytic seizure. He was very actively engaged in large monetary transactions, which were naturally a source of anxiety. He had a house in town, but having been advised by the late Dr. Todd to live at Brighton, he had taken a house there, and travelled to and fro daily by the express train. The symptoms of which he complained began to appear about four months after taking up his residence at Brighton, and he had undergone a variety of treatment without benefit, and was just hesitating about trying homœopathy, when I saw him. I advised him to give up the journeys for a month, and to make the experiment of living quietly in town. In a fortnight his rest was perfectly restored, and the other symptoms rapidly disappeared, so that at the end of the month he was as well as ever again. After three months he was persuaded to join his family at Brighton again, and resumed his daily journeys. In a few days his rest became broken, and in two months all the old symptoms returned. By giving up the journeys and residing in town he was again perfectly restored; but it being the end of the season, when the house at Brighton could not be readily disposed of, and yielding to the wishes of his family, he again resumed his journeys. In a month's time he was rendered so seriously unwell that he hesitated no longer in taking up his permanent residence in town, and since this time (now more than two years ago) he has enjoyed perfect health.

A barrister in large practice, about fifty years of age, had a house about twenty miles from town, and travelled daily to and fro by rail. He complained that he found he was incapacitated for work on arriving in the morning, and that he was unable to bring his mind to bear properly upon a subject until he had had lunch, when the effect of the journey seemed to wear off; and that after the return journey he was unable to sleep, or did so but slightly. He had tried various plans—walking in the country, riding, &c.,—all of which only made him worse, and increased the feeling of *malaise*. Bearing in mind the former case, I strongly urged him to sleep in town for a time, and with the best results, for he found that his night's rest was restored, and that his intellect was as bright in the morning as it had formerly been. After some weeks, considering himself quite well, the country journeys were resumed, and with them the old troubles. In a month, indeed, all the old symptoms returned, and he was forced to relinquish his country residence. Since this time (more than twelve months ago) he has had no cause of complaint."

The following is an interesting case of evidently nervous affection of the heart, which was mistaken for serious disease of that organ, but which was rapidly relieved by the patient's giving up the practice which had produced his discomfort—the daily journey by rail, in this instance only over a short distance. For this case we are also indebted to Dr. Radcliffe:—

"A gentleman, aged thirty-four, holding an important Government appointment, took a house about fourteen miles away from the scene of his daily duties. After a few months, he suffered from palpitations, pain about the region of the heart, and a general feeling of anxiety. For this he consulted an eminent physician, who diagnosed serious organic mischief. This naturally distressed the patient considerably, and he was on the point of throwing up his appointment, when, coming to me, I suggested that he should try the effects of giving up his short daily journeys before taking so important a step. This was done; he was rapidly restored to health, and he has since had no indication of cardiac mischief."

Case of epilepsy aggravated by railway travelling, by Dr. Anthony.

An important illustration of the effects of railway travelling upon the disordered brain is afforded by the following interesting case, communicated to us by John Anthony, M.D. Cantab., Physician to the Children's Hospital, and to the General Dispensary, Birmingham:—"Some few years ago I was travelling physician to a young officer in the army, who suffered from attacks of epilepsy about once or twice a month, and had done so for some years. Railroads at that time were not very common on the continent, and our transit from place to place was generally by a comfortable travelling chariot, the motion of which seemed to have no sort of influence on the frequency of the epileptic seizures. But I had soon occasion to observe that whenever we had a few hours' journey by rail it was either followed by a series of epileptic seizures, or else the fits came on in the railway carriage, accompanied with so much congestion that a treatment of weeks was required to even get the system into its usual condition; these induced fits being out of all measure more severe than the usual seizures, which, as epileptic fits often do, seemed rather to relieve the system than otherwise. This effect of railway travelling on my poor patient was so marked and led to so much mischief that we were obliged to eschew travelling by rail altogether; and as the rail in certain districts had quite driven away all post-horses, &c., we were put to curious shifts in order to make even an ordinary journey. For instance, in coming from Berlin to Hamburg by rail, the journey is made easily in seven or eight hours; but we had to make the passage by the rivers Spree and Elbe in a rickety boat, with its most wretched accommodation, involving (however absurd it may seem) an all but wreck on one of the mud-banks of the Elbe,—our transit occupying three days! My individual experience since that time goes to show that the constant vibration of railway travelling determines, either primarily or secondarily, a large amount of blood to the brain; and after a long railway journey I have known many persons to suffer for some days from extreme giddiness, accompanied by a deep flushing of the face and strong pulsation of the temporal arteries."

Apoplexy.

Where there is any reason to suspect a tendency to apoplexy, railway travelling should unquestionably be considered as an element of danger. Public attention has been more than once directed to this point by the occurrence of deaths from this cause in railway carriages. The sudden death of Lord Canterbury in a railway carriage caused the subject to be much discussed some few years since. A pamphlet on the subject was published by Dr. Badeley,* but was shortly afterwards withdrawn from circulation. Dr. Badeley discusses the subject with much good sense, and negatives the theory that apoplexy may be attributed to railway travelling in the ordinary course of events, although recognising the impropriety of habitual railway travelling in persons who are predisposed to the disease. Many such cases have occurred, and their comparative frequency has naturally attracted attention. In a communication from Dr. W. Rogers, Winslow, Bucks, fourteen years surgeon to the railway works at Wolverton, he mentions having been called to several cases in which persons had been seized with apoplexy while travelling.

Sir R. Martin on insolatio.

In a communication from Sir Ranald Martin, allusion is made to a similar experience of the inability to bear railway travelling under which persons labour who have suffered from such a weakness of the spinal cord and brain as follows upon sun-stroke. Sir Ranald Martin says:—"Many lamentable instances of the chronic sequelæ to sun-stroke have come under my observation during the last four years, the results of Indian service. Amongst the most deplorable were those of medical officers, because they knew the nature of the case and of its dangers. Many of them, the worst examples, complained much of the effects of railway movement, and some could not have recourse to this mode of travelling even for very short distances, as the disturbance of the cerebral function and the increased uneasiness along the spine precluded their doing so."

It may be readily understood that where there is predisposition to spinal softening, the frequent concussions, and the congestion of the grey matter of the cord incidental to prolonged railway travelling, cannot fail to be prejudicial. The effects are illustrated by the instances referred to by Sir R. Martin. In the following case, communicated by Mr. Ernest Hart, the predisposition was not so clearly marked, but the effects were completely observed, and they ceased upon discontinuing railway travelling, which was held to be the exciting cause:—

Case of spinal anæsthesia induced by daily travelling, by Mr. Ernest Hart.

"In November, 1859, a gentleman, actively interested in the work of the Rescue Society, came under my care with symptoms of spinal congestion, accompanied with loss of sensation in the lower limbs and lower half of the trunk, which at that time and subsequently I had reason to attribute to railway travelling. He was in the habit of travelling daily forty miles, to town and back, by a second-class carriage, with bare wooden benches, unprovided with cushions, on a line of railway of which the permanent way was then in a notoriously very rough state, so that the movement of the carriages was necessarily great. The symptoms indicated an affection of the sensory columns of the cord. They had existed for thirteen weeks before I was consulted. This patient was in the habit of sponging himself with cold water every morning, and he thus describes his condition in a written statement of his case.

'I first noticed that when I passed the sponge over the right side, a little below the armpit, there was a space as large as the hand without the least feeling; and round the edge of it

* Is Railway Travelling conducive to Apoplexy? By J. C. Badeley, M.D. Cantab. London: Smith, Elder, and Co. Brighton: Robert Folthorp and Co. 1845.

there were sharp, shooting pains, as though fine hot wire were being drawn backwards and forwards. The space mentioned was quite devoid of feeling. Thinking it was caused by stagnation of the blood, I began rubbing the part with a piece of horsehair cloth, until the skin began to chafe, but still without any sensation. This anæsthesia extended gradually downwards; and under the same impression as to the nature of the malady, I was in the habit of getting a hard brush, and using it with such force that the skin would peel off. I felt no pain, and so complete was the deadness of feeling that it was only by inspection I could satisfy myself that I was dressed. So devoid of feeling were the feet, that when standing in a crowd at the Lombard-street Post-office a gentleman trod heavily on my foot, and turned and begged my pardon. I had not felt him do it, but when I took my stocking off at night the skin was abraded from my toes. My previous health had been unexceptionably good, and, with this exception, was so when I was thus affected.'

I desired this gentleman to abstain altogether from railway travelling, and to take up his residence in London. The therapeutical treatment which I employed consisted in iron, aloes, and strychnia, and subsequently Faradization, to aid in restoring sensation to the surface. In a recent communication from this gentleman (January the 8th, 1862) he says: 'In two months from the time of my first receiving your advice the feeling was restored in part, some days nearly perfect, at other times it would fall back again. In three months I may say that the feeling was perfectly restored, and I have enjoyed excellent health since that time.' This affection seemed to me at the time to be clearly attributable to the influence of habitual railway travelling on the hard benches of a second-class carriage. I could find no other exciting or predisposing cause. On removal of this cause, the spinal affection, which had been steadily increasing, yielded completely to treatment."

Where disease of the bones of the spine exists there is an obvious unfitness for habitual railway travelling; and persons affected with spinal curvature, or with other grave affections of the vertebral column, need to exercise due caution in this respect. Where caries of the spine is present, it may be needful to employ careful precautions even for single and necessary journeys. On this point Mr. William Adams, surgeon to the Royal Orthopædic Hospital, has made the following communication:—

Mr. Wm. Adams on railway travelling in diseases of the vertebral column.

"With regard to the influence of railway travelling on persons affected with spinal curvature, the effects are so variable it would seem impossible to lay down any exact rule in reference to the extent or severity of the curvature and the pain or other symptoms caused by railway travelling. For example, many patients suffering from slight spinal curvature are quite unable to travel by railway; whilst we meet with cases of a severe form in patients who are not injuriously affected by it. For instance, a lady suffering from moderately severe lateral curvature, who travelled up from Exeter by railway—five hours' journey—suffered so much from the motion of the railway carriage that she was obliged throughout the journey to rest upon both arms by keeping them extended with the hands on the seat, and have the head supported, so as to prevent motion as far as possible; and even with these precautions a great deal of spinal pain and irritation was produced, from which she did not recover for several days. In another instance—that of a young gentleman affected with a very severe form of lateral curvature in the lumbar and lower dorsal region (altogether a very much more severe case than that just alluded to), who recently travelled up from Exeter to consult me—the patient bore the journey without any additional inconvenience whatever being produced, although he had habitually suffered much more pain than the case previously mentioned. In another case, a lady affected with a very severe form of double lateral curvature, who occasionally travels up from Hull to see me, suffers so much from the journey as to be always confined to her bed for a few days afterwards, complaining of pain in the back, general prostration, and derangement of the liver.

Cases of this kind, in which the patient affected with curvature of the spine suffers more or less severely from railway travelling, frequently come under my observation. But at the same time we also see many cases of spinal curvature, sometimes of severe form, in which railway travelling is borne without inconvenience; and it is difficult to determine the circumstances, either in reference to the form and situation of the spinal curvature, or the constitutional condition of the patient, which lead to these different results. Speaking generally, the liability to pain co-exists with a disposition to increase in the spinal curvature; and old cases which have remained stationary or without increase for a long time are those which bear the railway travelling without inconvenience.

In cases of disease of the spine—i. e., destructive disease of the ordinary form affecting the bodies of the vertebræ, railway travelling cannot be borne without much pain and inconvenience when the disease is in the early stage, or when it is actively progressing; but in the very chronic condition in which we frequently see this disease, I have known patients bear long railway journeys without much inconvenience, even though disease may still exist."

The physiological influence of railway travelling upon vision has been already discussed; and from the character and rapidity of the retinal impressions, as well as the exposure to draughts of air, it may be understood how certain pathological effects may also result. These effects are amongst those most commonly recognised and provided against; the use of "railway goggles," smoked glasses, and other contrivances, being not uncommon amongst those who habitually travel by rail and are predisposed to any form of ophthalmic disease. The precise conditions clinically observed are described in the following communication, which we have received from Mr. White Cooper, surgeon-oculist to the Queen and at St. Mary's Hospital:—

Mr. White Cooper on the sight as affected by railway travelling.

"Daily experience convinces me of the injurious consequences to the eyesight which have followed the introduction of railway travelling, and with it the strong inducements to read whilst on the journey. In the majority of cases, the publications so read are cheap papers or books purchased at the station, printed in imperfect type on thin paper. Under the most favourable circumstances, there is on railways a vibration requiring incessant efforts on the part of the muscles and adjusting apparatus of the eyes to follow the shaking words, and in proportion as the carriages are ill-hung or the line rough are these efforts great. Many persons never can read in railway carriages; a sensation of swimming in the head speedily follows the attempt. There can be no doubt that the practice is fraught with danger; the effort is analogous to that made by the muscles of the body to maintain the equilibrium, whence proceeds much of the stiffness and fatigue inseparable from long journeys.

The occasional traveller who endeavours to read is obliged to pause from time to time to rest his eyes. The habitual railway reader finds the first indications of warning in the desire for more frequent pauses; the eyes are impatient of the strain, and the periods during which it can be borne become shorter and shorter. Supposing these warnings disregarded, the irritability of the eyes increases, and displays itself in ordinary reading, especially by artificial light; a peculiar sensation is felt, compelling the person to frequently close his eyes and press his hand upon them. Some complain of aching and darting pains; others of a 'dragging' sensation, as if the eyes were pulled back into the sockets. In aggravated cases, the irritability and neuralgic tendency are such that the individual is debarred from all pursuits requiring persistent and steady vision. These symptoms, once established, are extremely difficult to remove, complete repose of the eyes during a lengthened period being in many instances absolutely essential.

Numerous tunnels on a railway create another evil; the sudden transition from darkness to bright light as the train rushes into the glare of day is especially hurtful to the large number of persons, whose studies have been interrupted by the darkness, and who recommence the perusal of their paper the moment the train emerges.

I have seen patients whose eyes have suffered severely from the pernicious practice of reading by lamp-light during night journeys; here is superadded to the ordinary evils that of imperfect, flickering light, with proportionally increased strain on the sight.

The annoyance and often injury to the eyes by particles of grit flying into them need only be referred to; instances of violent inflammation and lasting injury have fallen under my notice."

It has been very frequently asserted by French and English physicians, that deafness may follow from the vibrations which affect the tympanum, as the result of the incessant noise in railway travelling. Deafness is one of the affections set down by Duchesne and others as most frequently following the labours of guards, drivers, &c. Our observations tend to this result amongst the English *employés*. Deafness, however, is a serious disqualification for a guard or driver; since, where the hearing is imperfect, or exists only on one side, the subject of it is often unable to distinguish the direction whence a sound—such as an alarm signal—proceeds. Hence the men rather conceal this defect from their employers, and it is probable that a considerable amount of unsuspected disease of the ears exists amongst them. On this subject we may quote a communication made to us by Mr. Harvey, F.R.C.S., Surgeon to the Royal Dispensary for Diseases of the Ear:—

"My attention has long been directed to a certain class of disorders affecting chiefly the head, ear, and throat, resulting in deafness, neuralgic pains in the ear and face, and frequently in temporary paralysis of the facial nerve. In most of these affections, pains of a rheumatic character are more or less developed. They are to be traced to exposure to cold, and especially to draughts of cold air while travelling by railway in damp, wet weather during the autumn and winter months. I find, also, that most of these cases occur on the Northern and Eastern lines of rail, which pass through marshy districts. Cases have occurred, and are now occurring to me, in which certain persons otherwise in good health have paid the penalty of a long railway journey in an attack of deafness or rheumatic headache, lasting for weeks, or even months, which the use of proper precaution would have avoided. To these cases, to their causes, and the peculiar and aggravating symptoms attending them, I directed attention as far back as 1851.* Both sexes appear to suffer, but females less so, probably because the face and head are covered, and therefore, to some extent, protected from the cold currents playing on those parts. So far, therefore, as concerns this mode of travelling, the results do not appear inevitable, but rather to arise from incaution and unnecessary exposure. The well-known anæsthetic influence of cold applied to the surface of the body will explain the paralysis and deformity and disturbance of the nervous centres that are observed in these cases. In the same way the continued draught of cold air driven into the external ear, and on to the membrane of the tympanum, will account for the temporary deafness and benumbed sensation so frequently complained of by travellers, and particularly those in commercial life, where journeys are taken at all seasons, and regardless of protection.

If healthy persons are thus subject to attacks of deafness and other evanescent symptoms about the head and face from this mode of travelling, how important it is that those who have a damaged organ, and especially that very common proof of it, a discharge from one or both ears, should cautiously preserve themselves against cold! Those whose means enable them to travel in first-class carriages are evidently less exposed to the evils above-named than either second or third class passengers; but to the officials of the company, such as the engine-driver, stoker, and guard, it is attended with far more serious consequences. There are many at this time with diseased organs, who, had they been examined by competent persons, would have been dissuaded from the occupation. In some of these unhappy cases, not merely the organ of hearing, but life also has been endangered. And the risk, too, is not confined to the individual, but he is rendered incapable of satisfactorily discharging the duties of so responsible an office. I could mention many railway *employés* with only one sound ear who are now doing duty; and I ask what is the consequence of this imperfect hearing? When both ears are perfect, we can judge of the direction of sounds without turning the head, because the strength of the vibration is unequal on the two sides, and, by comparing the two impressions, instantaneously decide whence the sound proceeds; but when a person is deaf with one ear, the comparison is difficult; thus he is frequently obliged to turn his head in order to bring the tube of the ear in a line with the waves of sound, before he can ascertain whence it proceeds.

The chilliness experienced by railway travellers after waiting for the train on a cold, wet day, establishes a strong predisposition to the subsequent attack. The feet first become cold, the circulation is disturbed, the whole surface falls below the usual temperature, and any naturally weak organ is especially liable to failure. It is, therefore, impossible to avoid the conclusion, that strong currents of cold and damp air, added to the vibratory motion of the carriages, are the main cause of a class of diseases, to which, as connected with deafness, no one appears to have directed observation until the introduction of railway travelling.

Quite recently I have had under my notice two persons, in whom headache, accompanied by deafness and incessant noises in the ears, was a prominent symptom, regularly produced by railway journeys taken to and from Brighton daily. These cases, and others in the same way, resisted all kinds of treatment, until the vibration and travelling were relinquished. I do not hesitate to say that disease of some portion of the ear may soon be lighted up by this cause, where any local predisposition exists."

* On Rheumatism and Neuralgia of the Head and Ear. London: Renshaw.

Correspondence.

"Audi alteram partem."

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

To the Editor of THE LANCET.

SIR,—I have perused your correspondent "Justitia's" communication respecting the contents of the able and truthful article in your journal of last week, p. 86. I am not surprised at the tone of your correspondent's letter, for there are too many ever ready to find an excuse for evading their duty. For the last fifty years, how many thousands of times have I heard it mentioned, as a matter of deep regret, that there did not exist an "asylum" for the over-taxed and worn-out practitioner, whose days and nights have been passed in relieving the distresses of others, often without the prospect of pecuniary reward, and who too frequently find themselves overtaken by age, sickness, or poverty, without a place wherein to lay their heads, except the parish union.

You may imagine, then, how disheartening it is to an individual who has had the moral courage to embark in this noble enterprise, and who has succeeded, under God's blessing, by untiring energy in establishing it, to hear the frivolous excuses put forward by those who will not contribute to this God-send of our noble profession. It is not true that the successful candidates have been from or near the metropolis; on the contrary, there have never been more than four elected from this great city; whilst of the remaining thirty-six on the

foundation many have come from the most distant parts of England and Wales. The same thing can be said of the aged residents, who are all, with the exception of two, from the provinces.

Your correspondent states that candidates are indebted to their wealthy patrons and friends for their success; but if he means to insinuate that any unfair play is practised, I can deny it most distinctly. Not a candidate has ever entered the institution except by the legitimate voice of the governors. "Justitia" need not imagine for an instant that the Council or I am wedded to this popular mode of election; on the contrary, we deplore the necessity that exists for so great an outlay of money and time by the candidates, and would most gladly dispense with it at once and for ever could we but see our way clearly to the support of so much needed an institution by any other means.

Now, I will tell "Justitia," and those of his inclining, how they may save all this trouble, exposure, anxiety, and expense to the poor candidates. If he and the 12,000 men who have never contributed one shilling, will gladden the heart of the treasurer with £5 5s. each, or, what may be easier to them, will subscribe £1 1s. annually for five years, we can secure a glorious endowment fund to fall back upon, and I will unhesitatingly engage to give up the present unsatisfactory mode of election, so that admission into the College shall not cost the candidate five shillings.

It is easier to find fault than to suggest a remedy; but let "Justitia" prove himself an earnest friend and well-wisher of this noble institution by setting about securing its success by either of the modes I have indicated, and I will undertake scrupulously and most cordially to carry out what I here promise.

I am, Sir, your obedient servant,

New Cavendish-street, Jan. 1862. JOHN PROPERT.

To the Editor of THE LANCET.

SIR,—I am pleased with the letter of "Justitia" in your impression of last week. It is an attempt to vindicate the twelve thousand medical men you seek to reproach for not subscribing to the Royal Medical Benevolent College and Medical Benevolent Society.

To gain the unanimous support of the profession, we want something more than a society where a small pittance left by the deceased surgeon shuts the door of the charity, or a College benevolent and royal as that at Epsom is, but where metropolitan interest and patronage often succeed against "the hard struggling and friendless provincial aspirant." These institutions, noble of their kind, and most worthy of all support, must, however, be looked upon simply as *charities* to be supported by the rich and affluent.

The one great feeling that actuates many of us in withholding our subscriptions from these excellent charities is because no satisfactory answer can be given to the question—What certainty have we that our subscriptions of £2 2s. or upwards per annum will benefit our families? Every prudent parent of moderate means, and with a family, must, in the first place, look to this question, and the doubtful answer turns his thoughts to the fact that the amount of his subscription will assure his life for a certain sum—a course he at once adopts.

Institute, Sir, a fund or a college, and make the subscriptions or donations what you like, only by some means give us a certainty or a fair and reasonable claim or right for the benefit of our widows and children at our death. Do not let us trust alone to charity, to the aid of friends, to the sickening and heart-breaking process of begging votes; but give us, as I have said, a *claim*, and I believe you will find an institution, so constituted, would gain the support of the whole profession. The scheme would, doubtless, require the talent of some astute actuary to unfold its details; but supported by your powerful pen the result would be certain.

Your constant reader,

London, January, 1862. M.D.

To the Editor of THE LANCET.

SIR,—The broad fact that every guinea subscribed to the College *goes to support the widow and orphan* ought to comfort your correspondent, "Justitia," even although the special candidate for whom he is interested be for a time excluded. Let him, however, be encouraged to support this noble charity; let him persevere in his efforts to obtain new subscribers, and *to secure their votes*, and doubtless he will in due time carry his election.

The opinion that local and high interest can ensure success is entirely beyond the mark, knowing as I do that on several occasions the candidates of members of the Council and of the Treasurer himself have been defeated for want of the much-needed general support of the mass of the subscribers. Moreover, it may be asserted that on no occasion has a candidate obtained his election by purchase. Diligence and success in canvassing alone ensure a candidate's admission, and it is certain that without such any case may fail of fulfilling the wishes of its friends.

I remain, Sir, your humble servant,

Jan. 1862. A COUNTRY SUBSCRIBER.

NEW REMEDIES
INTRODUCED INTO THE PRACTICE OF MEDICINE.

To the Editor of THE LANCET.

SIR,—I beg to forward you two papers bearing upon the subject of new remedies, and in doing so I take the opportunity of pointing out a slight mistake which occurs in one of the interesting papers now being published in THE LANCET. By reference to them it will be seen that I do not say that hellebore is adulterated with black cohosh or cimicifuga (*actæa racemosa*), but with baneberry (*actæa spicata*). The former is an American plant, the latter a European species, and the only one likely to be used for the purpose. I am very glad to find that the subject of new remedies has been entered upon in such an old and valuable periodical as THE LANCET, and I believe much good will arise therefrom.

As regards guaco, I believe this kind of Dr. Pritchard's is not derived from mikania guaco of the Compositæ, but from an Aristolochia; but at present I am not quite certain about it.

Yours, &c.,

ROBERT BENTLEY, F.L.S.

Clarendon Villas, Belsize-road, Jan. 1862.

*** It was the mikania guaco referred to by Humboldt and Bompland, a genus belonging to the natural order "Asteraceæ." If the root used by Dr. Pritchard is an "Aristolochia," it is contrary to the intention of the French doctors, from whom it is obtained, or a substitution.—ED. L.

To the Editor of THE LANCET.

SIR,—I hail with the greatest satisfaction the efforts made by THE LANCET to bring before the profession the therapeutic action of drugs as yet comparatively unknown to the majority of practitioners. How many will stand the test time will tell; and while testing the new, let us not forget the old, but rather try their combination, carefully scanning the comparative merits of each. This is a branch of therapeutics almost unlimited in its various practical applications. Not long ago, catechu, tannin, chalk, acetate of lead, &c., were combined with opium for the cure of diarrhœa, autumnal or otherwise; until Dr. Hynes, of Nottingham, directed attention to the use of nitric acid along with our old and much-esteemed anodyne, of which it may be said that success is much more certain than failure. But I wish now more particularly to draw attention to the treatment of that most formidable complication of typhoid fever, *persistent diarrhœa*, by the following formula:—Dilute nitric acid, six drachms; tincture of opium, half an ounce; sulphate of quinine, half a drachm; tincture of nux vomica, two drachms; chloric ether, half an ounce; tincture of cardamoms, two ounces; water to six ounces: mix. One tablespoonful every two hours till purging ceases. This may be supplemented by warm-water and turpentine epithems, or even enemas of starch and opium, as advised by Dr. Todd; although I believe that if the formula is exhibited early enough, combined with warm-water epithems, there will be little need of the enemas, which in many instances are both filthy and inconvenient. In illustration, I mention the following:—

Mary B——, seen on the sixth day of typhoid fever occurring after parturition. Pulse 140, weak and irregular; middle of tongue brown and dry; delirious at night; rose spots scattered over abdomen; pain in lower part of abdomen on firm pressure; along with persistent diarrhœa, which remained uncontrolled by injections, compound chalk mixtures, &c., but was temporarily checked by the nitric acid and opium, which in the course of a few days also began to fail of effect, although increased in dose. Tympanitis now began to distress the patient very much, and there was great prostration; so the nux vomica and quinine were added, with the effect of entirely stopping the exhausting discharge.

I have been successful in severe cases of the same nature lately, and venture to recommend it as at least worthy of a trial in a symptom so common, and at the same time so fatal, as the diarrhœa of typhoid fever.

I am, Sir, yours respectfully,

Hartlepool, January, 1862. ROBERT INGLIS, M.D.

PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR SPECIAL CORRESPONDENT.)

THE medical public of Paris were not a little gratified this morning at seeing M. Ricord reappear for a moment in a professorial character at the Hôtel Dieu, and in hearing from his lips a masterly dissertation on the subject of secondary syphilis. The occurrence of a somewhat perplexing case, in the words of M. Trousseau, had afforded a pretext for the recall of the great syphilographer from a retirement justly lamented by the scientific world at large; and the applause which greeted M. Ricord's temporary resuscitation as a clinical lecturer fully showed how fresh still are the regrets of the profession at the far too early withdrawal of so great and useful a teacher from the hospital career. The case to which we are indebted for the above-mentioned event is as follows:—A girl, aged eighteen, was admitted into the Salle St. Bernard some weeks ago with uterine catarrh, and during her stay was vaccinated, in consequence of several cases of small-pox having occurred in the same ward. The child from whom the lymph was obtained had been vaccinated from a healthy infant, itself vaccinated with matter procured from the Academy of Medicine. The former, together with its mother, had been a patient in the Hôtel Dieu, and constantly under the eye of M. Trousseau, who was able to testify to the freedom of both from any syphilitic taint; and a like immunity was enjoyed by the girl in question previous to vaccination. Eight days after the latter operation, the punctures showed no signs of inflammatory action, and as the uterine affection was deemed cured the patient was discharged from the hospital, with an injunction to return again shortly. At the expiration of ten days she reappeared, and casually mentioned that two "pimples" had arisen on the site of the vaccination, and that "she believed the operation was likely to be successful after all." The arm was then examined, and two patches, apparently of an eczematous nature, were seen as described. A fortnight afterwards, an eruption of roseola having broken out over the whole body, the girl again returned, and on this occasion M. Trousseau, suspecting the real character of the case, determined on calling M. Ricord to his aid. This surgeon, after carefully examining the patient, found, as local evidences of syphilitic infection, two rupious patches on the arm occupying the site of the vaccination punctures, with engorgement of the axillary glands of the same side, and as constitutional symptoms the coppery roseolar eruption, together with well-marked nocturnal headache. He also called attention to the induration occupying the bases of the rupious patches, and to their unmistakable affinity with the real Hunterian chancre; but as to the mystery now so essential to unravel, the when and the how the admixture of syphilitic virus with the vaccine lymph occurred, we are still as much in the dark as ever. I trust, however, shortly to be able to announce that a satisfactory explanation of this suspicious circumstance has been arrived at, and that the source of impurity has been clearly traced.

The discussion on the high rates of mortality in the Paris hospitals, as compared with those of London, was resumed on Tuesday at the Academy, and an interesting discourse was delivered by M. Davenne, ex-Director of the Assistance Publique. Although M. Davenne recommended the French surgeons to imitate their British *confrères* in their after-treatment of operated patients, by simplifying the dressings now in use, &c., I do not believe, from my own observation, that he has in any way touched upon the real causes of the difference revealed by the statistics of the two capitals. These causes I hold to consist in the quality of the food and in the general nature of the treatment employed in the French hospitals. An old coachman, now of any age above eighty, a regular John Bull, sent me a pressing message one day to call in and see him, as he considered himself in a dying state. "What is the matter, George?" said I, on entering. "Ah! you may well ask what. Everything's the matter. I'm blind and deaf and dumb" (the latter certainly an exaggeration, by the way), "and hard-by dead. They've done it for me, they have." "Who?" said I. "Oh, them chaps, them d—d (blessed) French hockilix (oculists?). I've been in a hospital, sir, with a strong weakness, sir, in this here heye, sir, as is hout, sir; and if you'd a knowed, sir, the messes I have been made to eat, sir, you wouldn't have asked 'what,' I'm thinking. A morning, sir, soup—greasy water it was; eleven o'clock, beef—rags, sir, rags; evening, sir, more soup, more like in the morning. And if that there for seven long months aint enough to do for an English, with insides as is English, why, then, I don't know a horse from a donkey, sir." "Had you no wine?" replied I. "Oh, yes, sir, plenty of wine, plenty, and winegar was a joke to it. Oh, yes, plenty of wine, plenty;" and here my patient went into a melancholy chuckle. I believe poor old George had, in his own personal experience, stumbled against one of the real causes of the increased rate of mortality in the Paris hospitals. In the over-abundance of washy soup, deficiency of good succulent meat, insufficiency of alcohol in the wine, and in the general absence of tonic and stimulant treatment, together with the overcrowding, overheating, and bad ventilation of the wards, may be found, I think, the chief explanation of M. Lefort's facts. How often have I felt inclined to say to some *chef de service*, who has just ordered two or three *bouillons* as daily allowance to a cachectic-looking patient, with little else the matter with him than starvation, "For heaven's sake give the man bark, port wine, and beefsteaks, and he will be well in a week!" but my courage has failed me, and I have been silent. The present discussion shows me that I was wrong, and I might have forestalled the coming reform by many years, and perchance saved many lives. Paris is sadly in want of a Todd.

A report, read at the Academy of Medicine by M. Poggiale, on the pulverization of liquids, is likely to serve as prelude to a serious discussion and radical analysis of the subject. M. Poggiale has gathered all the evidence within his reach, and believes, in spite of the opposite opinions of MM. Champouillon, Brian, and Pietra-Santa, that the spray of liquids can be inspired into the lung, and consequently can act, in a therapeutical sense, as remedy or vehicle. He moreover maintains that a considerable loss of temperature is entailed by the process, and that in the case of sulphureous waters especially the medicinal ingredient is greatly modified by pulverization, and consequently that a further contingent of experiment is necessary before the precise utility of M. Sales-Giron's new method of treatment can be satisfactorily estimated.

A rising young oculist, at present *chef de clinique* at M. Desmarres' dispensary, Dr. Galinzowski, has, with the assistance of M. Charrière, junior, succeeded in constructing an ophthalmoscope, which is likely to become very popular, from the fact that closed shutters and darkened rooms are no longer necessary conditions for its use. His instrument consists of two portions: the first formed of three tubes, sliding the one within the other, spy glass fashion; the second, also cylindrical in shape, and adapting itself to the extremity of the former, terminating obliquely in order to fit the margin of the orbit. The concave mirror, perforated by a central hole, and next the eye of the examiner, is contained in the smallest of the telescopic tubes, and gains access to the light by means of a wide lateral notch. The lens, situated in the second portion of the apparatus, is focused by means of a screw, a mechanical contrivance which obviates the difficulty so well understood by, and so discouraging to, the novice in ophthalmoscopic investigation.

An authentic account of the melancholy occurrence which I mentioned in my letter of the 11th instant—namely, the murder of a medical man by a former patient, has been given to the professional world through the columns of the *Gazette des Hôpitaux*. Dr. Hannin, of Gondrecourt, denies that any of the motives hitherto attributed to the culprit could have compelled him to the commission of so revolting an act of cruelty and cowardice, as no grounds for such motives existed; and this practitioner inquires whether the man, Vincent, had not more probably been seized with a sudden impulse of homicidal monomania.

Paris, Jan. 21st, 1862.

DEATH OF PROFESSOR MOREAU.—This highly respected accoucheur, the senior professor at the Faculty of Paris, has just died, at the age of seventy-two, after a few days' illness. Arteritis, obstructing the circulation in one arm and leg, was the proximate cause of M. Moreau's unexpected end. Very touching discourses were delivered at the funeral; from these we gather that the late professor is much regretted, and had secured for himself the reputation, not only of a most talented and accomplished physician, but also of a thoroughly honest man.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners on the 21st instant, and when eligible will be admitted to the pass examination:—

Bloor, John Tabberer, Birmingham.
Bowen, Aubrey, Birmingham.
Carreg, Griffith Llewelyn, Birmingham.
Cartmel, Henry, Manchester.
Clarke, William, Manchester.
Gimblett, John, St. Thomas's Hosp.
Goss, Tregenna B., Middlesex Hosp.
Hamlin, William Thorne, St. Mary's Hospital.
Hume, James Denham, Edinburgh.
Jardine, Arthur David, Middlesex Hospital.
Low, Alex. James, St. Bartholomew's Hospital.
Martin, Wm., St. Bartholomew's Hosp.
Morris, John Walter, Manchester.
Mottershead, John, Manchester.
Mowat, George, Westminster Hospital.
Nash, John, Westminster Hospital.
Newcombe, James, Toronto.
Norris, George Robert, King's College.
Powell, Frederick, Westminster Hosp.
Rogers, Maurice Cohen, Charing-cross Hospital.
Sheppard, Walter Geo., Westminster Hospital.
Vines, Frederic Castell, Dublin.
Walker, Samuel Edwd., Birmingham.
Wilkin, John Frederic, Dublin.
Wilson, Thomas, Manchester.

The following gentlemen passed the same examinations on the 22nd inst.:—

Addison, Charles Edward, St. Bartholomew's Hospital.
Baker, Thomas Franklin, Leeds.
Bartley, Acheson George, Belfast.
Bruce, James, St. Bartholomew's Hosp.
Castaneda, John, University College.
Davenport, William, Glasgow.
Lamb, Annesley, St. George's Hospital.
McIver, Donald, Edinburgh.
Matthew, Alfred John, King's College.
Morrison, John, Univ. of Louisiana.
Nicholson, John, Birmingham.
Pattinson, Henry Albert, Edinburgh.
Patton, Alfred, Belfast.
Pollock, Edward James, King's Coll.
Pottle, Edgar Geo., St. Barthol. Hosp.
Senior, Augustus Reeve, Charing-cross Hospital.
Shepherd, John, Edinburgh.
Spence, James Atkinson West, Edinburgh.
Steward, Thos. Theodore, Birmingham.
Ward, Henry Leekamp, King's College.
Williams, John Wilkins, St. George's Hospital.
Wood, Ekthem, Toronto.
Wyman, William Saunderson, St. Thomas's Hospital.

APOTHECARIES' HALL.—The following gentleman passed his examination in the science and practice of medicine, and received a certificate to practise, on the 9th inst.:—

Hine, William Conway, Thickthorn, Ilminster, Somerset.

The following gentlemen passed their examination on the 16th inst.:—

Edwards, Morgan John, Rhundda Valley, Newbridge, Glamorgan.
Makens, John, Hingshall, Suffolk.
Nightingall, Robert Salisbury, Commercial-terrace, Limehouse.

ROYAL COLLEGE OF SURGEONS, EDINBURGH: ELECTION OF SECRETARY.—At a meeting of this College, held on the 18th inst., on the motion of the President, seconded by Dr. Struthers, Dr. James Simson, F.R.C.S., was unanimously elected Secretary to the College.

UNIVERSITY COLLEGE HOSPITAL.—The Duke of Argyll has expressed his willingness, at the request of the Council, to preside at the public dinner, to take place early in April, in aid of the funds of this Hospital.——At a session of Council of the above College on the 11th inst., a donation of £200 for the hospital was received from Mrs. Joseph Locke, to whom a vote of thanks was passed for the munificent gift.

PRESENTATION TO SIR C. HASTINGS.—A very splendid piece of plate has just been presented to Sir C. Hastings. We shall notice the proceedings in the next LANCET.

M. DELAFOND, director of the Veterinary School at Alfort, near Paris, has just died, a few months only after obtaining the appointment. He was a man of great merit, and is much regretted.

COUNT CAVOUR'S BENEVOLENCE.—This much-lamented statesman had, in his lifetime, set apart £2000 in aid of the establishment of a Children's Hospital at Turin. We learn that his heir, M. Ainard de Cavour, has just added £1600 to that sum, besides an annual endowment to the institution.

RARE CASE OF TETANUS.—A boy died at St. Bartholomew's Hospital from slight injuries and a scratch received on the nose, terminating in tetanus. The injuries were caused by an attempt being made to strike him with a board, which unfortunately caught his nose and grazed it. The wound went on very well until Sunday morning; about midday he became worse, all the symptoms of tetanus set in, and he died on Monday morning about four o'clock.

A VOTE OF THANKS.—At a meeting of the Board of Guardians of the Gloucester Union, it was unanimously resolved "That the thanks of the Board be given to Albert Pleydell Carter, Esq., medical officer of district No. 1 of this union, for the vigilance and attention he has evinced in his attendance on the poor of his district."

THE LATE MR. PITTARD.—The friends of this estimable gentleman will be glad to know that a sum of £531, privately collected by a ladies' committee in Sydney, New South Wales, has been handed to Mrs. Pittard, his widow, for her use and that of her eight children. A committee of gentlemen educated at King's College is now organized for the same benevolent purpose, to whom subscriptions may be paid, or to Mr. Stone, of the Royal College of Surgeons.—We are requested by Professor Owen to notify a donation of £5 to the Pittard Fund from Mr. John Adams, F.R.C.S., of St. Helen's-place. Mr. Henry Smith also states that Dr. Budd has subscribed the sum of £5 5*s.* to the same fund.

SOUTH HANTS MEDICAL AND CHIRURGICAL SOCIETY.—The first *réunion* of this scientific Society was held on the 10th inst., at the residence of Dr. Wiblin, 73, Marland-place, for the purpose of electing the office-bearers for the ensuing year. Dr. Wiblin was elected President; Dr. Weston (Shirley), Vice-President; Dr. H. Falk, Hon. Secretary; Dr. Dusantoy, Dr. Bushnan (Salisbury), S. Dyer, Esq. (Ringwood), and Dr. Welch, Members of Council. There were present at this meeting, in addition to the Council, Dr. John Osborne (Bitterne), Dr. Beaman (London), Dr. Cheesman, Dr. Smith (Fordingbridge), Mr. Bencraft, Dr. Williams, Mr. R. W. Dobben, (of H.M.'s Ship *Dauntless*), and Mr. Henry Smith, Assistant-Surgeon at King's College Hospital. The last-named gentleman read before the members of the Society a paper on an important branch of surgical science, and a very agreeable evening was spent by all present.

SOUTHAMPTON MEDICAL SOCIETY.—At the annual meeting of this Society, convened for the election of office-bearers for the year, and held at Dr. Maul's on the 7th inst., the following gentlemen were elected:—*President:* Dr. Oke.—*Vice-President:* Francis Cooper, Esq.—*Committee of Management:* Henry Dayman, Esq., F.R.C.S.; J. King Sampson, Esq., F.R.C.S.; Dr. Scott.—*Hon. Secretaries:* Leonard A. Lawrence, Esq.; Dr. Langstaff.—*Librarian:* Dr. Sims.—*Treasurer of the Book Club:* Dr. Scott.

VACANT PROFESSORSHIP OF CHEMISTRY.—The death of Dr. Fyfe has rendered vacant the chair of Chemistry in the University of Aberdeen. Under the recent ordinances of the University Commissioners, the chair is a valuable one; and there are a teaching assistant and a laboratory attendant attached to it, with salaries, besides an allowance for class expenses. The patronage is vested in the Lord Rector and other members of the University Court, six in all, including the Rector.

THE TRAINING OF NURSES.—A meeting was held in Liverpool this week for the purpose of inaugurating the Association for the Training of Nurses, at which the Lord Mayor presided. The meeting was numerously attended, amongst others by the Lord Bishop of Chester, the Ven. Archdeacon Jones, the Rev. Canon M'Neale, and many influential laymen. Letters were read from several gentlemen offering large sums to aid the object of the meeting in the way of both donations and subscriptions. Resolutions were adopted approving the objects of the proposed institution; and, after passing a vote of thanks to the Chairman, the meeting separated.

SANITARY CONDITION OF GALWAY.—The local Board of Guardians have determined to carry out the provisions of the Removal of Nuisances Act as applicable to this town, and steps are now being taken to improve its sanitary condition, of which it stands in much need.

MEDICAL MISSION IN PEKIN.—The Rev. Joseph Edkins, writing to the *Patriot* from Tien-Tsin, says:—"Dr. Lockhart, by the assistance of Mr. Bruce, has now commenced a hospital in the metropolis itself, but some months must elapse before any further step can be made, so we are informed, in proceeding with missionary work in that vast and important city."

THE SERPENTINE.—The number of bathers in the Serpentine during the past season was 369,139, and the number of casualties 52, including 11 cases of attempted suicide, in three of which, unfortunately, the attempt proved too successful.

UNIVERSITY COLLEGE SOIREE.—The professors of this institution gave a *soirée* to their friends and pupils on Tuesday evening. On the present occasion, the new anatomical museum, which has been recently completed, was thrown open, and it formed, along with the general library on the one side and the Flaxman gallery on the other, a most extensive suite, and enabled the large number assembled to view without inconvenience the various objects of science and art distributed throughout the apartments. Amongst other interesting objects,

we observed in full operation the Master of the Mint's newly-invented method of chemical analysis. The chief merit of the "dialyzer," or apparatus for effecting analysis by diffusion, is its extreme simplicity. It consists of nothing more than a species of sieve, having gutta-percha sides and a parchment bottom. When in use, it is floated in a basin of distilled water, and the substances under examination are thrown on it as on a filter, and then allowed to remain undisturbed for twenty-four hours. At the end of this time all the crystallizable salts will be found to have passed through the vegetable parchment bottom, while the organic matter is left behind. By this means, arsenious acid, metallic salts, strychnine, and other poisons, can be readily separated from organic solutions in medico-legal inquiries without much loss of time, and certainly without much trouble. Messrs. Smith and Beck exhibited some new forms of microscopes, specially adapted for the examination of the fine transparent injections which are now being made by a distinguished German professor of surgery. Amongst the works of art, our attention was chiefly attracted to a set of photographs by Albert from Kaulbach's original crayon drawings of illustrations to Goethe's works. These photographs are the largest that have ever been made, and are, we believe, the only complete set in this country. The *soirée*, which was kept up till a late hour, proved instructive as well as agreeable.

MEDALS FOR PHYSIOLOGISTS.—At the meeting of the French Academy of Sciences, on the 23rd December, the annual prizes were distributed:—The Monthyon Prize for Experimental Physiology has been awarded to M.M. Hyrtl, of Vienna, and Kühne, of Berlin. At the same meeting, M. Flourens delivered an oration in memory of Prof. Tiedemann, the celebrated anatomist, who died on the 22nd of January last.

THE FOOD OF MAN.—The Food Museum of the South Kensington Exhibition has been considerably extended. Products are now displayed from Siam and Japan, together with collections from China, forming a very interesting series, illustrating the diet of the oriental nations. The exhibition of rhinoceros' hides and elephants' trunks in this department has excited much curiosity; but they are only specimens of the numerous articles containing gelatine that are eaten in soups and stews by the natives of the East. The dried shell-fish, and fish of various kinds, and the great variety of sea-weeds, are likely to excite interest as articles of diet in the minds of European visitors.

FLOATING SANITARIUM.—The steamer "Bentinck," purchased by the Government from the Peninsular and Oriental Company at the commencement of the China war, is to be converted into an hospital ship, for the reception of sick officers who may be recommended a change of air from the plains of Bengal to the renovating atmosphere of the ocean. The vessel will be stationed at the mouth of the river at Sandheads.

A DENTIST'S REWARD.—At the annual meeting of the Committee of the Freemasons' School, the Court voted that in consideration of his services, and the extra expenses he was occasionally put to, Brother Matthews, the honorary surgeon dentist, should have two extra votes at their elections in future.

LIFE IN THE GLACIAL SEAS.—From the investigations of the scientific expedition despatched by the Swedish Government, to investigate the physical geography of Spitzbergen, it appears that animal life is abundant in these glacial regions, at the great depth of 1250 fathoms.

A GIGANTIC SAURIAN.—The discovery of the fossil bones of a new and gigantic saurian, in a cutting recently made for a railway line near Poligny, has just been announced by M. Bertherand. The animal must have been between 90 and 120 feet in length, and must have existed towards the end of the Triassic period.

THE GASES OF VESUVIUS.—M. Ch. Saint Claire Deville writes from Naples, stating that he has, in the present eruption of Vesuvius, ascertained the new fact that carburetted hydrogen has been evolved by the volcano.

WALKING AGAINST GRAVITY.—Mr. Tuffen West, of the Linnæan Society, has been making some curious investigations "into the appendages of the feet of insects subservient to climbing or holding." The ability of insects to walk on the ceiling or up a pane of glass, has been ascribed to two causes—first, to the entire cushions of flies' feet acting as suckers; second, to a gummy fluid secreted from the hairs on their feet, which enables them to stick to glass, &c. The feet of some earth-beetles are found to possess similar appendages, and these insects have accordingly as perfect powers of walking on glass as flies; but it appears, from Mr. West's observations, the question is not yet satisfactorily solved, whether it is a minute hook, a sucker, or a gum, which enables flies or other insects to suspend themselves or walk freely against gravity.

DR. R. P. RITCHIE, whose valuable series of articles on one of the Causes of Insanity, published in the first volume of THE LANCET for 1861, attracted so much attention, is a candidate for the vacant office of Deputy Commissioner in Lunacy for Scotland. Dr. Ritchie's acquirements and great experience in all matters relating to the insane well fit him for the appointment.

DEATH BY INHALATION OF CHLOROFORM AT LISBON.—For the benefit of those who collect such accidents, we just allude to this unfortunate case, which was observed at Lisbon as far back as 1859. It is reported in the *Journal de la Société &c. de Lisbonne*, and quoted by the *Gazette Médicale de Paris*, 4th Jan., 1862. The patient was a feeble subject, who was to have two cysts, one of the lid and the other of the tongue, removed. Two drachms of chloroform were poured on some lint, and hardly had he begun to inhale than he was dreadfully excited. Immediately on the subsidence of the convulsive movements the patient fell into a collapse, and had three violent *fits of sneezing*, upon which the heart ceased to beat. Breathing took place several times afterwards, at long intervals, and at last completely stopped. It was the first case at the San Joz6 Hospital.

Obituary.

JAMES O'BEIRNE, M.D.

ANOTHER well-known name has been removed from the list of life. Dr. O'Beirne, after some months of gradual decay, during which he was assiduously attended by Dr. Burke Ryan, a former pupil, died on Thursday, the 16th inst., aged seventy-six. He was a M.D. of Edinburgh, Fellow and Ex-President of the Royal College of Surgeons in Ireland, Surgeon Extraordinary in Ireland to the Queen, and had been Senior Consulting Surgeon to Maynooth College, Surgeon to Jervis-street Hospital, and Richmond, Whitworth, and Hardwick Fever Hospitals. He served in the Royal Artillery, and came up towards the end of the Battle of Waterloo, and we believe assisted at the removal of the late Marquis of Anglesey's leg. The Marquis, while Lord-Lieutenant of Ireland, always had a warm welcome for him. Dr. O'Beirne held a War Medal with eight clasps, and was known for his views on defecation and tetanus. Upon the latter subject he had a manuscript work finished, and in the hands of his friend Dr. Jacob, with the hope of having it published by subscription. This work added much to his other anxieties. He laboured under bronchitis for a few days, and on the 14th, a pulse of 160, with other symptoms, made it necessary for Dr. Ryan, in the least alarming manner, to ask if his worldly affairs were put in order. This much surprised him, and he anxiously inquired if there were any danger. On the day following no pulse could be felt at the wrist, but he still, in the most collected manner, spoke about the treatment, and of the many patients formerly under his care. In the evening his attendants were warned that he might expire towards the morning of Thursday. On the morning of this latter day, at 10 o'clock, he was still quite conscious, but spoke with difficulty; no pulse at the wrist. At half-past 10 he became unconscious, and by 11 o'clock he was dead. There was not one moment's wandering from first to last, little or no agony, and it would be impossible to witness a more easy death.

MEDICAL VACANCIES.

AN Assistant House-Surgeon is required for the Bradford Infirmary and Dispensary.

The office of Medical Superintendent and Apothecary to the Glasgow Royal Infirmary is now vacant.

There is a vacancy for a Poor-law Medical Officer for the Middlewich District of the Northwich Union, Cheshire.

MEDICAL APPOINTMENTS.

MR. CLAUDE C. CLARKMONT has been elected by the Vestry of St. Pancras to be the District Medical Officer for the North-west District of that Parish.

MR. T. S. SWINSON has been elected House-Surgeon to the Warneford Hospital, Leamington.

Mr. Robert Bianchi has been elected Surgeon to St. Saviour's Union Workhouse.

Dr. Titus Deville has been permanently appointed Lecturer on Practical Anatomy at the Royal School of Medicine, Manchester.

Mr. John Hurst has been appointed House-Apothecary and Assistant to the Hon. Secretary of the Bridgewater Infirmary, Somersetshire, in the room of Mr. Henry Whitney, resigned.

The following appointments of Poor-law Medical Officers have been made in the Fulham Union, Middlesex—viz.: Mr. Barnard Spaull, to the Union Workhouse; Dr. Mushet, to the 1st District; Mr. Fitzwilliam Horton, to the 2nd District; Mr. Barnard Edward Spaull, to the 3rd District; Mr. Alfred Hunt, to the 4th District; and Mr. Thos. Wm. Chamberlain Perfect, to the 5th District, as altered.

Mr. Robert Alexander Clarke has been appointed Medical Officer to the new Workhouse, Bolton, Lancashire.

MILITARY AND NAVAL MEDICAL INTELLIGENCE.

Commissions signed by Lords-Lieutenant.—13th Lancashire Rifle Volunteer Corps: George Bretherton Barron, M.D., to be Hon. Assist.-Surg.

1st Administrative Batt. of Westmorland Rifle Volunteers: William Longmire, to be Surg.

Memorandum.—*Her* Majesty has been pleased to accept the resignation of the Commission held by Hon. Assist.-Surg. Robert Walker in the 3rd Westmorland Rifle Volunteer Corps.

16th Shropshire Rifle Volunteer Corps: William Edward Baddeley, Gent., to be Hon. Assist.-Surg.

3rd Westmorland Rifle Volunteer Corps; Samuel Noble, to be Assist.-Surg., vice Walker, resigned.

29th Middlesex Rifle Volunteer Corps: The Queen has been pleased to accept the resignation of the Commission held in this Corps by Surg. William Reynolds Hayne.

2nd Devon Administrative Brigade: John Reid, to be Surg.; Samuel Nathaniel Elliot, to be Assist.-Surg.

Surg. D. Thomas, to the *Donegal*; Surg. W. Lawrence, Assist.-Surg. D. O'Connor, and Acting Assist.-Surg. G. Robertson, to the *Shannon*; Assist.-Surg. D. R. Alcock, to the *Investigator*; Surg.-Superintendent Dr. Alexander Watson, to the *Norwood* Convict Ship; Assist.-Surg. Dr. Wm. Lockhart, to the Jamaica Hospital; Acting Assist.-Surg. Francis H. Brown, to the *Imaum*; Assist.-Surg. Martin Magill, to the *Russell*.

Births, Marriages, and Deaths.

BIRTHS.

On the 17th of Nov., at Ryston Lodge, Newbridge, Co. Kildare, the wife of W. Ord Mackenzie, M.D., Surg.-Major 3rd (King's Own) Hussars, of a son.

On the 10th inst., at Mount Haigh, Kingstown, near Dublin, the wife of Foster J. Newland, M.D., of a son.

On the 16th inst., at Birtley Villa, near Chester-le-street, Durham, the wife of George Gibson, M.D., of a daughter.

On the 16th inst., at Old Steyne, Brighton, the wife of E. L. Ormerod, M.D., of a son, still-born.

On the 17th inst., at Marlborough-place, Old Kent-road, the wife of G. M. Todd, M.D., of a son.

On the 17th inst., at Erith, Kent, the wife of James Davidson, M.D., H.M.'s Ship *Wellesley*, of a daughter.

On the 18th inst., the wife of Henry Harden, Esq., M.R.C.S., of St. Mawes, Cornwall, of a son.

On the 20th inst., at Brynfedwan Treherbert, Glamorganshire, the wife of Wm. Evans, L.R.C.P., of a daughter.

On the 20th inst., at Chester Villa, Lansdowne-road, Kensington-park, the wife of George Kingston Barton, M.D., of a daughter.

MARRIAGES.

On the 5th ult., at St. John's Church, Calcutta, Dr. Worsley Poulett Harris, Civil Surgeon, of Budaon, Rohilcund, to Mary Susan, eldest daughter of the late John Morgan, Esq., Surgeon to Guy's Hospital.

On the 28th ult., Alexander Fleming, M.D., of Temple-row, Birmingham, to Mary, second daughter of Francis Maxwell, Esq., of Drumpark, Stewartry of Kirkcudbright.

On the 9th inst., at St. Peter's, the Rev. J. Galwey, son of the late St. John Galwey, M.D., of Mallow, to Judith Elizabeth, eldest daughter of the Rev. H. N. Ormsby, Vicar of Carrig.

On the 15th inst., at the Metropolitan Church, Marlborough-street, Dublin, Laurence Alfred Renehan, Esq., L.R.C.S.I., of The Elms, Finglas, eldest son of Thos. Renehan, Esq., of Rathpatrick, Co. Kilkenny, to Helena Mary, eldest daughter of the late Michael Gavin, Esq., of Cappa House, Co. Clare.

DEATHS.

On the 11th of Dec., at Couva, Trinidad, Alex. Osmond Black, Esq., Surgeon, eldest son of Alex. Black, Esq., of Regent-square, London, aged 27.

On the 1st inst., at Toronto, C.W., Fras. C. T. Arnoldi, M.D., aged 56.

On the 5th inst., at Minvand House, Co. Carlow, Abraham Harrison, Esq., son of the late Robert Harrison, M.D., Professor of Anatomy T.C.D.

On the 11th inst., at Truro, Frederick T. Bond, Esq., Assistant-Surgeon in H.M.'s Bombay Army, aged 29.

On the 11th inst., at Greenlaw, near Milton-bridge, George H. Ramsay, L.R.C.P., late of Aldborough, Yorkshire, aged 31.

On the 11th inst., at Victoria-terrace, Dublin, Joseph E. Barrett, M.D., late of Finglas.

On the 13th inst., at Pentland Villa, Murrayfield, Edinburgh, Archibald W. Cockburn, M.D., Deputy Commissioner in Lunacy for Scotland, eldest son of the late Lord Cockburn.

On the 15th inst., at Mount Pleasant, Liverpool, Elinor Augusta, third daughter of A. B. Steele, Esq., M.R.C.S., aged 2 years and 4 months.

On the 18th inst., at Portman-square, Henry Lindsay Ramsbotham, Lieut. in H.M.'s Indian Army, elder son of Francis H. Ramsbotham, M.D., aged 24.

On the 20th inst., at Swineshead, Lincolnshire, Christopher Irving, Esq., M.R.C.S.

Medical Diary of the Week.

MONDAY, JAN. 27
- ROYAL FREE HOSPITAL.—Operations, 2 P.M.
- METROPOLITAN FREE HOSPITAL.—The following Operation will be performed at 2 P.M.:—By Mr. G. B. Childs: Amputation of Foot.
- MEDICAL SOCIETY OF LONDON.—8½ P.M. Clinical Discussion. (Case 1. Mr. Ernest Hart, "On a Case of Aneurism of the Orbit.")

TUESDAY, JAN. 28
- GUY'S HOSPITAL.—Operations, 1½ P.M.
- WESTMINSTER HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Mr. John Marshall, "On the Physiology of the Senses."
- ROYAL MEDICAL AND CHIRURGICAL SOCIETY OF LONDON.—8½ P.M. Mr. Sidney Ringer, "On the Temperature, Urea, &c., in Scarlet Fever.—Mr. Ernest Hart, "On the Treatment of Aneurism by Flexion."

WEDNESDAY, JAN. 29
- MIDDLESEX HOSPITAL.—Operations, 1 P.M.
- ST. MARY'S HOSPITAL.—Operations, 1 P.M.
- UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
- ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
- HUNTERIAN SOCIETY.—7 P.M. Special Meeting of Council.—8 P.M. Dr. Stephen H. Ward, "Some Cases of Typhoid Fever."

THURSDAY, JAN. 30
- ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
- CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
- LONDON HOSPITAL.—Operations, 1½ P.M.
- GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 2 P.M.
- LONDON SURGICAL HOME.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Heat."

FRIDAY, JAN. 31
- WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
- ROYAL INSTITUTION.—8 P.M. Mr. Wm. Hopkins, "On the Theories of the Motions of Glaciers."

SATURDAY, FEB. 1
- ST. THOMAS'S HOSPITAL.—Operations, 1 P.M.
- ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
- KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
- CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION.—3 P.M. Rev. A. J. D'Orsey, "On the English Language."
- CHRISTIAN MEDICAL ASSOCIATION.—8 P.M. Meeting at Freemasons' Hall.

THE ANALYTICAL SANITARY COMMISSION.

RECORDS OF THE RESULTS OF

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OF THE

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To Correspondents.

Oniya.—The two theories of diabetes may be thus briefly compared:—One theory assumes the sugar to be formed exclusively from starch food; the other assumes it to have a double origin, partly from starch food, and partly from protein compounds—these two sources giving about equal quantities of sugar. Mr. Haughton, of Dublin, has lately written a memoir in support of the latter theory, which he maintains explains the presence of sugar in the excretions in almost any description of food, and affords a rational explanation of the large excretion of urea by attributing it to a decomposition, "not attended by the development of *work* done." Refer to Mr. Haughton's paper, which is well worth study.

Doubtful can style himself "Dr.," and legally practise as a physician.

A Manufacturer.—Tea, tobacco, snuff, &c., packed in lead-foil, may become deleterious from the formation of a subcarbonate of lead, which becomes gradually disseminated through the packet. It has been recommended that *tin*-foil should be substituted; but Mr. Baldock, of Holloway, has lately shown that tin-foil itself is so extensively adulterated with lead, that but slight advantage would be gained.

J. B. M'D.—In the Students' Number of THE LANCET.

Dr. Edwin Hearne, of Southampton, calls our attention to the fact that small-pox has occurred on board the *Tuscarora*, one poor patient having been brought to the Southampton Poorhouse suffering from that virulent disease. He suggests that, as all ships arriving at Southampton with cases of yellow fever—a disease which he regards as not contagious in this country—are subject to quarantine, a ship the crew of which are affected with small-pox should be subjected to the same law.

Dr. Wadham.—The request shall be complied with.

B. P.—1. Not unless he commenced professional study previous to October, 1861.—2. *Wiener Medizinische Wochenschrift.* Office in Vienna: Stadt, Herrengasse. Editor, Dr. Wittelshöfer.

Lord Blantyre has forwarded to us a letter respecting the dispute between Dr. A. P. Stewart and Mr. Baker Brown. Though the communication contains evidence of a most important character, we think it would be premature to publish it at present.

A QUERY.

To the Editor of THE LANCET.

SIR,—Can you or any of your readers tell me the title and price of any good book, or refer me to any good work, on the most improved and proper plan of sewering and draining towns, with the necessary stench and water traps? Our town is of considerable extent, and very little fall, with iron piping terminating about half a mile from the town into a small channel about two-thirds down towards low-water mark, ending with open mouths, so that the bad air may be blown back into the town by the wind, or pushed up by each rising tide. I remain, Sir, yours, &c.,

January, 1862. A CONSTANT READER.

Studens should go carefully through the second part of the "Statistical Report of Patients treated in St. Thomas's Hospital from the years 1857 to 1860." A very good idea can thus be obtained of the different methods of treating some of the important maladies to which our correspondent alludes. The "Report" we have referred to reflects much credit upon the various registrars of the hospital and upon Dr. W. H. Stone.

Mr. M. R. Robb.—1. It is not probable that he would. He might contract matrimony.—2. No.—3. Yes. He should not marry anyone allied to him by consanguinity.

Dr. John Warner.—The report of Mr. Childs' case of Lithotomy has been received, and shall shortly appear in our "Mirror."

Mr. Percival, (Herne Bay.)—The hardness of water is mainly dependent upon the carbonate and sulphate of lime contained in it, and is in proportion to their amount. When water crystallizes or freezes, these salts are precipitated, so that ice water is always soft. This fact probably explains the softening which very cold water is said sometimes to undergo even before it freezes. The arrangement of the particles may probably become altered, and the saline substances precipitated to some extent even before the water assumes the solid form.

Mr. Alexander Ellis.—Next week.

Mr. Seth Smith, of Upper East Smithfield, City, states that he has cured a very obstinate case of condylomata by one scruple of sulphate of copper to one ounce of water, dabbed on with lint, and six grains of powder of sabine applied afterwards three times a day. It was used for six or seven weeks constantly, and effected a perfect cure.

Alpha.—Any good work on the subject may be used.

P. P. P.—He is a doctor of medicine, not a "physician," in the strict sense of the word.

THE WINDHAM CASE.

THE following letter appeared in *The Times* of Thursday:—

"SIR,—It appears from your report that Dr. Whidborne, who officiated *in loco parentis* at the marriage of Mrs. Windham, represented himself in the witness-box as possessing an 'Edinburgh degree.' I therefore beg to say that the University from which alone a degree can be procured here has no connexion whatever with any person of this name.—I am, &c.,

"A MEDICAL PROFESSOR IN THE UNIVERSITY OF
"Edinburgh, Jan. 20th." EDINBURGH.

Dr. Vallance (Sharesbrook) will find the cases alluded to by Mr. de Méric at a late meeting of the Medical Society of London—1st, in Mr. Porter's articles, *Dublin Journal of Medical Science*, May, 1857; 2nd, Mr. Langston Parker's book, second edition, 1860, pp. 177 and 179; 3rd, Mr. Collis, on the Venereal Disease, 1857, p. 263; 4th, Dr. Tyler Smith on Leucorrhœa, 1855, pp. 172 and 173; 5th, Mr. de Méric's Lettsomian Lectures, 1858, pp. 65—69. The latter author has, in his case-book, several instances of escape, on the side of the mother, which he intends shortly to publish.

Medicus, (Dublin.)—We are not acquainted with any such institution expressly devoted to members of the Roman Catholic faith.

Mr. Samuel Parker, (Birmingham.)—The cases shall be inserted if forwarded.

CHLOROSIS.

To the Editor of THE LANCET.

SIR,—Would any of your readers kindly give me the benefit of their experience in chlorosis, as I have an obstinate case of long standing which steadily resists all treatment? I am, Sir, yours, &c.,

January, 1862. M.D.

T. H. will find the information he seeks in our number for last week, page 86; but he should consult a medical practitioner.

Mr. W. H. Brown (J.P. for Antigua) writes as follows. We may preface his communication, however, by saying that there are many and great difficulties in the carrying out of his suggestion:—

"There being ample reason to believe that disease, especially amongst the poor, who are compelled to use *cheap* food, is aggravated or caused by its adulteration, as well as by being too often diseased, I most respectfully beg permission to submit to your consideration, as the philanthropic champion of the public in such matters, whether the medical gentlemen having patients to attend to could not be empowered, by Act of Parliament probably, to *scrutinize the quality*, as well as prescribe the quantity, of their diet; and, if advisable so to do, inform the police or other proper authorities of the grounds or nature of their suspicions of adulteration, so as to bring the delinquents to punishment as expeditiously as possible. Whilst upon this most vital subject, may I at the same time submit to your consideration whether the clergymen, visiting the poor in particular, might not be able to render very important aid in this matter, many of whom I know are well skilled for the purpose."

Miss Pearce, (Lincoln.)—The sugar off the iced cake has been examined both microscopically and chemically. It does not contain any poison or other substance which can afford an explanation of the symptoms described.

Dr. W. Strange shall receive a private note.

Mr. J. H. Wraith.—The mode of preparation is not made public.

THE HEALTH INFLUENCES OF RAILWAY TRAVELLING.

Medicus.—The cases are interesting; but most of the effects mentioned are attributable to other causes than the travelling. It is essential to very carefully distinguish the *post hoc* and *propter hoc* in an inquiry of this kind.

Mr. M'Innis.—The article in the *Quarterly* is an independent investigation. The figures there are very rough estimates indeed, the writer probably not being acquainted with certain peculiarities in the returns, for which due allowance is made in our calculations.

M. P.—Nothing but a very strong expression of public opinion can effect the result. The railway interest is so largely represented in the House, that the motive power must come from without.

A Traveller.—Certain improvements and alterations will be suggested in our summing-up of the subject.

Mr. Marley, (Bromyard.)—The letter will appear amongst the correspondence.

THE following communications and papers, though in type, we are compelled to defer until next week:—Dr. Dickman on Abscess of the Liver; Dr. Nash on Paralysis; Reports of the Pathological, Epidemiological, Harveian, North London, and Junior Medical Societies, &c.

ALL Books intended for Review in THE LANCET must be sent direct to the Office, 423, Strand, addressed to the Editor.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Bentley; Dr. Gairdner; Dr. Devenish; Mr. R. Marley; Dr. Wadham; Mr. M'Whinnie; Mr. Harden; Mr. Seth Smith; Dr. E. Hearne; Dr. R. Inglis; Mr. T. Davies; Mr. H. Bancorn; Mr. G. Hester, Margate; Mr. C. Brown, St. Aldates, (with enclosure;) Mr. W. Llewellyn, (with enclosure;) Mr. A. Higginson, Bootle; Messrs. Whicher and Cross, Petersfield; Mr. Jas. Bell, Broadclyst; Mr. W. Powell, Wolverhampton; Mr. M. R. Robb; Mr. Hesslegrave; Mr. Sutcliffe, Much-Wenlock; Mr. Lidderdale, (with enclosure;) Mr. Pickering, Swinshead, (with enclosure;) Mr. R. Bangza, Corbridge, (with enclosure;) Mr. Bate, Letterkenny; Mr. Lithgow, Weymouth, (with enclosure;) Mr. Castley, Killinghall, (with enclosure;) Mr. G. Croxton; Mr. J. A. White, Pendleton, (with enclosure;) Mr. G. Fielden, Shildon, (with enclosure;) Mr. A. Hannay, Liverpool; Dr. Crabb, (with enclosure;) Mr. W. Ellis, Morley, (with enclosure;) Mr. C. H. Moore; Mr. R. W. Bingham, Bristol; Mr. Beet, Ashford, (with enclosure;) Mr. C. M. Scott, Civil Hospital, Hong-Kong; Dr. C. Moss, Long Ashton, (with enclosure;) Mr. Evans, Brynsiddwan; Mr. W. Thomson, Melbourne; Mr. A. F. A. Greeves, Melbourne; Mr. J. R. Hughes, Liverpool; Mr. W. Williams, Penrhyn; Mr. H. F. Reynolds, Hull, (with enclosure;) Mr. D. Wilson, Taranaki; Dr. E. Power, Calcutta, (with enclosure;) Mr. Kemp, Castleford, (with enclosure;) Dr. Edwards, Cheltenham; Mr. Alex. Ellis; Dr. Knox; Mr. E. Poulton; Mr. Claremont; Royal Institution; J. J.; M. A. B.; Alpha, Chipping Norton; E. M., (with enclosure;) Neutus; E. P. M.D.; Medicus; Constant Reader; Doubtful; A Manufacturer; &c. &c.